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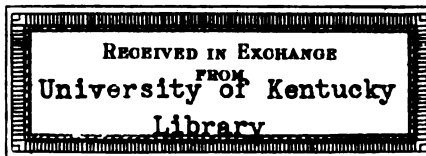
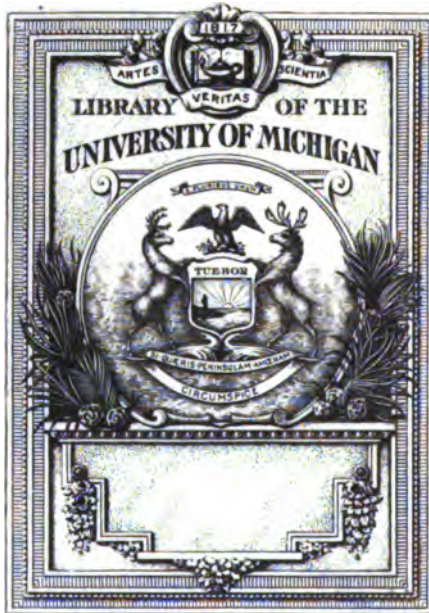
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PUBLIC DOCUMENTS

OF THE

STATE OF CONNECTICUT

VOL. IV — PART 1

1920

PRINTED AND BOUND IN COMPLIANCE WITH STATUTE

HARTFORD

1921

NOTE.

Commencing with the documents for the year 1900, a Document Number was assigned to each State departmental report.

This number was determined by the chronological order of the first printed independent issue of such report and will in future be retained by it, thus showing the relative chronological place it occupies in the printed reports of the State.

A list of these reports, with the date of first printed issue and the document number of each, appears on the following page.



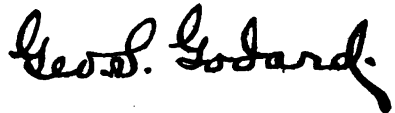
CHRONOLOGICAL ORDER OF FIRST PRINTED REPORTS OF DEPARTMENTS.

Document Number.		
1.	Comptroller	1807
2.	School Fund (since 1909 in Treasurer's report)	1809
3.	Governor's Message	1817
4.	State Prison	1828
5.	Bank Commissioner	1838
6.	Adjutant-General	1838
7.	Quartermaster-General	1839
8.	Board of Education (first issued by Commissioner of Com- mon Schools)	1839
9.	Vital Statistics (first issued by Secretary of State)	1847
10.	Treasurer	1852
11.	Connecticut School for Boys (Reform School)	1853
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30.	Shell-Fish Commissioners	1882
32.	Dairy and Food Commissioner	1887
33.	Factory Inspector	1887
34.	Storrs Agricultural Experiment Station	1889
35.	Board of Education of the Blind	1895
36.	Highway Commissioner	1897
38.	Commissioner on Domestic Animals	1898
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43.	Israel Putnam Memorial Camp Ground Commission	1902
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45.	State Police Department	1904
46.	Mediation and Arbitration, Board of	1901
47.	Geological and Natural History Survey	1903
48.	Tax Commissioner	1903
49.	Soldiers' Hospital Board (last report 1908)	1905
50.	Board of Control	1906
51.	Norwich State Hospital for the Insane	1906
52.	Quadrennial Statement of Property exempt from Taxation	1910
53.	Tuberculosis Commission	1910
54.	Connecticut Reformatory	1910
55.	Public Utilities Commission	1911
57.	Rivers, Harbors, and Bridges Commission	1912
58.	Workmen's Compensation Commission	1914
59.	Civil Service Commission	1914
60.	State Park Commission	1914
61.	Public Library Committee (formerly with Board of Edu- cation) 1915-1916-1917-1918	1914
62.	Agricultural Extension Service	1916
63.	State Board of Finance (not bound)	1916
64.	Commissioner of Motor Vehicles	1918
65.	Mansfield State Training School and Hospital	1918
66.	Commission on Uniform Legislation	1918
67.	Connecticut Farm for Women	1918
68.	State Agencies, etc. (in Treasurer's Report No. 10)	1920
	Special Industrial Investigation	
	Child Welfare Commission	

LIBRARY NOTE.

In order that each department report of the State of Connecticut for a series of years may be quickly located in the bound volumes of Public Documents, the Comptroller has also given each report a Binding Number by which its position in the bound volumes is permanently established, thus enabling each report to be found in the same position and volume from year to year.

That these several reports may be placed in the libraries of our several exchanges as soon as convenient after publication, he has provided that the State Librarian shall be supplied with two hundred sets bound in volumes of convenient size, each volume to be bound and labeled in harmony with the regular set and sent out as soon as possible after the printing of the reports belonging therein. This arrangement began with the reports for 1902.

A handwritten signature in dark ink, reading "Geo. B. Godard." The signature is written in a cursive style with a prominent initial "G" and a trailing flourish.

State Librarian.

CONNECTICUT STATE LIBRARY,
DECEMBER 31, 1920.

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L. arg
Times, Kentucky
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STATE OF CONNECTICUT

THIRTY-SIXTH REPORT

(42d AND 43d YEARS)

OF THE

STATE DEPARTMENT OF
HEALTH

FOR TWO YEARS ENDING JUNE 30, 1920

JOHN T. BLACK, M.D., Commissioner



HARTFORD

1920

PUBLICATION APPROVED
BY THE
BOARD OF CONTROL

THE TUTTLE, MOREHOUSE & TAYLOR COMPANY, PRINTERS
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1921

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Deputy Commissioner, STANLEY H. OSBORN, M.D., C.P.H.

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Industrial Wastes Board

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Henry R. Buck Hartford
Arthur M. Waitt Sharon
John H. Goss Waterbury
G. Clifford Foote New Haven
The Public Health Council



**REPORT OF PUBLIC HEALTH COUNCIL
REPORT OF COMMISSIONER OF HEALTH**

SECOND BIENNIAL REPORT OF THE COMMISSIONER OF HEALTH

To the Public Health Council:

Gentlemen:—I have the honor to submit the Report of the State Department of Health for the biennial period ending June 30, 1920, this being the second biennial report of the State Department of Health and the thirty-sixth state health report.

Since submitting the last report, the end of the state fiscal year has been changed from September 30 to June 30.

Reports

In previous reports, statistical data contained therein have been in conformity with the state fiscal year. As morbidity and mortality statistics are compiled by calendar years in this and other states, it imposes considerable labor and expense to adjust these to conform with the state fiscal year. This practice forbids ready comparison with statistics of other states. Beginning this year, all reports from the State Department of Health will carry statistical data for the preceding calendar year, although the report in general will cover matters of importance arising between the end of the calendar year and the date of the report.

Public Health Council

The department entered the period covered by this report in the early stages of reorganization, and its development into a well-organized and serviceable department of the state government has been accomplished under most trying and exacting circumstances.

The Public Health Council as a body has necessarily been frequently called upon for advice and assistance and many of its members as individuals have given freely of their time to assist in making the department a substantial and effective institution for the conservation of the health of the state.

Organization

Considerable progress has been made in perfecting the organization of the department in accordance with the legislative acts of 1917 and 1919. In this the department has been handicapped by the extraordinary demands imposed by reason of the War and the Influenza epidemic, as well as by its inability to secure and retain the necessary personnel. This latter difficulty was due primarily to lack of sufficient funds to meet the continuously increasing scale of wages.

The Legislature at its last session granted practically all the funds requested, but in the preparation of the budget, no allowance was made for the unprecedented increase in costs which have been conservatively estimated to have increased 40 per cent. over two years ago. As a consequence of the lessened value of the dollar, it has been necessary to curtail the work. The Resolution of the Public Health Council as adopted on May 14, 1920, indicates the extent of this curtailment:

"RESOLVED: That in view of the vote adopted by the Board of Control under date of April 6, 1920, the Council advises the Commissioner of Health that in its judgment it is essential that radical reductions must be made in the budget of the Department; although it is the opinion of the Council that no material part of the work now carried on by the several bureaus of the State Department of Health can be curtailed without serious prejudice to the health of the state.

In view of the refusal of the Board of Control to provide the funds made necessary for the continuance of the normal work of the Department by the steadily increasing cost of labor and materials, the Council feels obliged to recommend that the budget be so reduced as to avoid at all cost the accumulation of any additional deficit to that existing at present.

To this end it is recommended that the following steps suggested by the State Commissioner of Health be taken without delay:

That the position of Epidemiologist in the Division of Communicable Diseases be discontinued.

That the punch card service and indexing of back reports in the Bureau of Vital Statistics should be suspended.

That the expenses of the Laboratory should be curtailed if necessary by suspending the chemical analyses of water (such as cannot be made by the Division of Engineering) and by discontinuing the Wassermann test.

That the inspection of summer camps, hotels and seaside resorts be suspended.

That the birth certificate service be suspended.

That the automobile equipment of the department should be reduced.

That the publication of the Monthly Bulletin should be discontinued, or its cost substantially reduced."

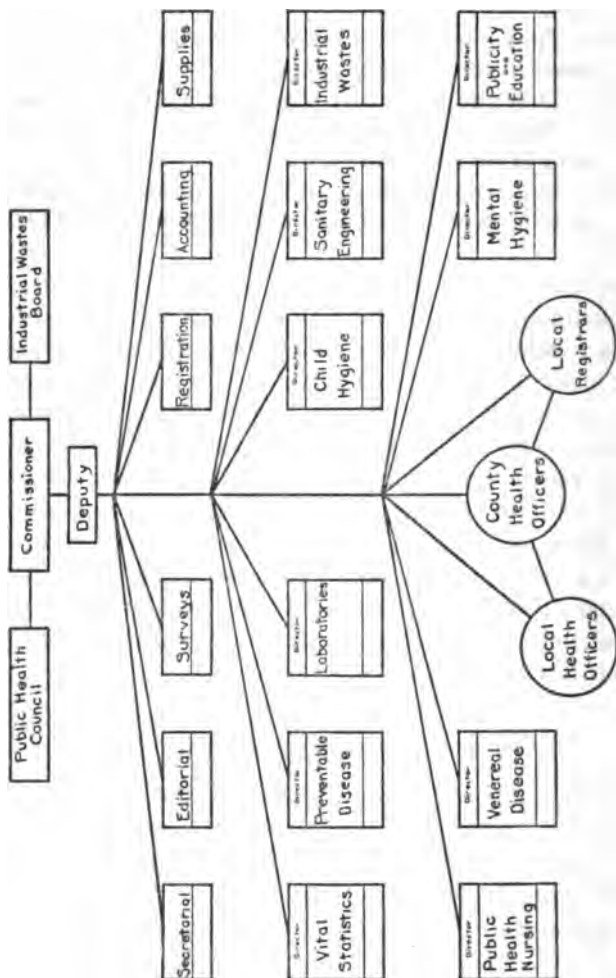
Fortunately, this curtailment has not required any material readjustment of the organization, and when sufficient financial aid is available, the department will still be in position to meet any contingency. The value of a well organized department of health with definite supervisory and administrative powers, as compared with a board of health with purely advisory powers, was demonstrated during the Influenza epidemic and other emergencies which arose during the War. Indicative of the status of the department of today as compared with five years ago, the American Medical Association method of rating for scope of activities and efficiency gave Connecticut 35 out of a possible 100 points in 1915, while in 1919 it has 80 points.

Organization Chart

On the following page will be found the plan of organization of the department. Most of the bureaus and divisions indicated are now recognized by statute or appropriation.

The present status and proposed development of these bureaus and divisions will be discussed in other parts of this report.

Connecticut State Department of Health

ORGANIZATION CHART

SUMMARY OF ACTIVITIES

Administration

Up to the present time, the Commissioner has been responsible for the details of the administrative duties of the department, as well as for the general supervision and direction of all bureaus. The administrative work comprises secretarial, editorial, survey, registration, accounting and purchasing for the entire department. It is impossible for the Commissioner with his increasing duties to continue to be responsible for this detail without neglecting more important work which is increasing with the growth of the department. A full-time Deputy Commissioner would remove a part of this burden.

It is needless to review the details of the administrative work, but it may be stated that modern office methods have been installed for the handling and filing of the large volume of correspondence and reports now received, and practical and economical systems have been introduced for purchasing, distribution of supplies and accounting.

The efficiency of the department has been lessened and the administrative duties multiplied by lack of proper housing. About one-fourth of the department is housed in the State Capitol, occupying space on the first floor, in the basement and in the attic; another fourth is on Church Street, Hartford, in rented quarters; the department laboratory is on the Experiment Station grounds at New Haven; and the Industrial Wastes laboratory and test rooms are in Winchester Hall, Yale University, while the antitoxins are kept in a public storehouse. The consolidation of the various bureaus under one roof would favor economy.

Vital Statistics

The Bureau of Vital Statistics is charged with the collection of birth, marriage and death certificates, the compilation of data secured therefrom, and the preservation of these records for reference. The demand for statistical data during the War was so great as to seriously interfere with the regular work of this bureau. For the same reason, and because of special Influenza statistics, but very little has been done toward bringing back reports up to date.

It may be recalled that when this bureau was organized, it took over work which was several years in arrears. Since May, 1920, when the punch card service was discontinued, the work of this bureau has necessarily fallen behind.

Complete and accurate statistical data are essential for the proper interpretation of the health of a state or community and for the measuring of the efficacy of protective agencies. Sufficient funds should be provided to enable this bureau to render prompt and efficient service.

It is desired to call attention to the deplorable condition of the vital records of the state. The department of health now has over a million records of birth, marriage and death in its custody which should be so filed and preserved as to serve the purpose intended, but these valuable records are now stored in wooden boxes in the attic of the Capitol, unprotected and useless for reference.

Preventable Diseases

During the two years covered by this report, the Bureau of Preventable Diseases has had the opportunity to show its worth. The Influenza epidemic, a special report of which will be found in the detail report of the bureau, was admirably handled. The tendency to panic was overcome by the systematic method adopted for the rendering of advice and assistance. Forty-nine physicians and a hundred nurses were secured with difficulty to assist in this work.

Since the organization of the bureau, special effort has been made looking to the control of typhoid fever, and the statistics indicate that this work has been effective. Other diseases are receiving such consideration as funds will permit.

The wisdom of requiring health officers to forward daily reports of communicable diseases to this bureau has been demonstrated. This method keeps the department constantly informed as to the health of the state and enables it to transmit advice and assistance without delay. It has made possible the issuance of a weekly morbidity report to health officers and others to whom it is of value.

The director of this bureau has been acting as Deputy Commissioner, but provision should be made whereby he may devote his entire time to the important work of his division.

Laboratories

The duties of this bureau are largely defined by statute, but the value of a laboratory depends upon the character of the work performed. A state laboratory, while rendering free service, is expected to be, and should be of the highest grade for scientific procedure and accuracy; consequently, only the best-qualified personnel should be retained. To retain such personnel, it is necessary to provide remuneration comparable with that of the industrial field. In the effort to maintain this high standard, and also because the work has almost doubled, this bureau is showing a large deficit.

The appropriation of \$100,000 made by the last Legislature for the construction of a laboratory building in conjunction with the Agricultural Experiment Station has not been utilized for the reason that the required building could not be erected for this sum at the present cost of construction. The badly crowded condition of the present laboratory must be relieved, and an additional appropriation will be requested.

Sanitary Engineering

The statutes requiring supervision of all water supplies and sewage disposal plants and the approval of plans for new or additional construction has placed upon this bureau an immense amount of work, particularly as it involved not only a preliminary survey of all installations, but the acquisition of plans and specifications where it was possible to secure the same. Many emergencies brought about by the failure of existing works to properly function have been given careful consideration. A general improvement of the condition of the watersheds is already noticeable, and a large number of surface supplies have introduced the safeguard of chlorination upon the recommendation of this bureau. At the present time, about one million people are protected by chlorinated water. By reason of the broad powers now possessed by the department, it was possible in the spring of 1919 to avert a serious situation by the purchase and distribution of chlorine which the water officials were unable to secure because of the freight embargo. The department took up the matter as a health emergency and was able to secure carload shipments to Hartford for distribution by auto truck.

Analyses of water of private wells and springs have been made in the past without follow-up to ascertain whether the conditions causing pollution had been removed. Every analysis now revealing pollution is carefully investigated and the conditions remedied.

This bureau has been called upon to investigate many complaints of general character, including public institutions, schools, industrial establishments and petty nuisances.

Summer resorts, summer boarding houses and camps were systematically inspected in 1919 as to their sanitary condition, but for lack of sufficient funds, only such places as were suspected of being prejudicial were inspected in the summer of 1920.

The rapid development of the soda water business, as a result of prohibition, has necessitated frequent sanitary inspection of these establishments.

Child Hygiene

Child Hygiene work has been conducted as an independent bureau since July 1, 1919, the child welfare work prior to this date being under the general administrative division. As a separate bureau, greater development has been possible and much good work has been accomplished. The mother of every new-born child is now receiving a birth certificate with a booklet on the care of the baby, but most of the work of this department has been devoted to the stimulation of local interest in child welfare work. This has been accomplished by lectures, film showings, exhibits, demonstrations and personal interviews. Preliminary studies have been made of the day nurseries, infants' boarding homes and the county homes of the state. Medical inspection of schools has been introduced in a number of localities in conjunction with an effort to promote public health nursing.

The weakness of the child hygiene work at the present time is the inability to reach the foreign mothers; and it is proposed, if sufficient funds are made available, to carry this work into the foreign quarters of the various cities and towns by means of an exhibit and demonstration car.

The rapidly reducing infant mortality rate indicates the effectiveness of the movement for the conservation of child

life. The rate has been reduced from 106 in 1915 to 86 in 1919 and it has been demonstrated in other countries that this rate can be reduced to 50. Such being the case, no further argument need be advanced for the continuation and extension of child welfare work.

Public Health Nursing

Public Health Nursing has been developed as a division of the Child Hygiene Bureau, but as it involves school, industrial, tuberculosis, visiting and general public health nursing, a wide and promising field for useful endeavor, it should receive independent consideration.

Considerable good work has, however, been accomplished during the past year in stimulating the various phases of public health nursing throughout the state and in standardizing qualifications and methods. Connecticut was the first state to adopt the coöperative scheme of handling the public health nurse system in conjunction with the American Red Cross, and an effort is now being made to coördinate all public health nursing agencies in this state. The greatest difficulty experienced in this work has been the inability to secure for the towns a sufficient number of qualified nurses to supply the demand created. The incoming Legislature will be asked to make Public Health Nursing a distinct activity of the department.

Mental Hygiene

Appreciating the rapid increase of nervous diseases, and with the knowledge that many nervous conditions, including insanity, can be prevented by proper care in early life, it was deemed advisable to make mental hygiene a special study. This study is being conducted under the direction of a volunteer psychiatrist in conjunction with the superintendents of the hospital for the insane and feeble-minded. Aside from the advisability of establishing clinics in the larger centers, we are not yet prepared to recommend any definite program, but believe that provision should be made for continuing this work.

Venereal Diseases

Venereal disease control work became a distinct activity of the department in 1918, when the Federal Government

allotted \$12,000 to the State for this purpose. Since July 1, 1919, the Federal and State Governments have each contributed one-half of a budget of \$24,000. With these funds and the opportunity afforded by war conditions for introducing this work, remarkable progress has been made. Over a thousand persons afflicted with one or the other of these destructive diseases have been treated in the clinics established by this department in the six larger cities, and private physicians report that, owing to the attention and publicity given these diseases, they are treating many more cases than formerly. As a consequence, there are being removed from communities by proper treatment, many infectious cases and the afflicted themselves are being saved the dire results of neglect or improper treatment.

Salvarsan is supplied through clinics and hospitals to all persons upon whom the purchase thereof would entail a financial hardship. The value of this work having been demonstrated and the possibility of Federal subsidy being withdrawn will necessitate larger appropriations in the future.

Publicity and Education

The publicity and educational features of the department of health have not been carried on as an independent division, although such segregation is advisable. It is conceded that in order to secure the intelligent coöperation of the public, it is necessary that they be informed as to the dangers surrounding them and the protective measures necessary; hence, bulletins, slides, moving pictures, lectures and exhibits are important features of health work. The department is in possession of a general exhibit, several hundred slides, moving picture machines and a dozen reels on health subjects. The Monthly Bulletin has been issued regularly, although its date of issue has frequently been delayed, and special bulletins have been issued from time to time on various subjects. The requests for educational lectures and pictures by local societies, labor unions, factory organizations, schools and clubs have so multiplied that it is deemed advisable to secure a supervisor for this work.

Antitoxin

Every effort has been made to encourage the early use of antitoxin and this propaganda, with the increased prevalence of diphtheria, has resulted in a much larger use of antitoxin. The free distribution of this remedy has resulted, not only in a reduction of the fatality rate from this disease, but in a saving to the families of the afflicted of approximately \$60,000 a year.

The vaccination of school children has also been encouraged, resulting in a much larger distribution of smallpox vaccine.

Typhoid vaccine, pneumococcus serum and tetanus antitoxin have been supplied in smaller quantities.

It is recommended that provision be made for the permanent distribution of salvarsan in a like manner.

Medical Registration

Licenses have been issued to 166 physicians and 13 midwives between July 1, 1918, and June 30, 1920. A number of requests for the prosecution of unlicensed practitioners have been made to County Health Officers and several convictions have been secured. The County Health Officers have in some instances instituted proceedings on their own initiative.

The Medical Practice Law, as now written in the statutes, is insufficient to enable proper control and should be amended.

The annual registration of all persons licensed to practice the healing arts, provided for by the last Legislature, has placed upon the department an immense amount of additional work, but the result has been that for the first time in the history of the state, an accurate list of practitioners has been compiled, and no difficulty is now encountered when it is desired to locate any individual practitioner.

Transcripts

The transcribing of birth and death certificates for the United States Census Bureau is conducted by the department, but the expense incurred is paid by the Census Bureau. This work is accounted for under the special act permitting the department to receive and expend funds from outside sources.

Industrial Wastes

The administrative duties of the work conducted under the direction of the Industrial Wastes Board have fallen to the department of health. This board consists of five persons appointed by the Governor and authorized to act with the department of health in making such investigations as may be necessary to ascertain the best method for the removal of pollution from the streams of the state. This work has been carried on for three years and valuable data has been secured and processes developed which will not only relieve the streams of pollution, but will be profitable as well. An exhaustive report on this work is in preparation.

Local Health Officers

Many local health officers have called upon the department for assistance in one way or another, and the policy of the department to advise, assist and support the local health officer in his work seems to be generally appreciated.

The health officers were called together in conference to consider Chapter I of the Sanitary Code before its adoption, but other conferences have not been called, because it was thought that county meetings and meetings of the Connecticut Public Health Association would suffice as health officers' conferences. We are convinced, however, that state conferences designed to discuss strictly health officer problems are necessary, and it is proposed to introduce such conferences next year.

Annual reports required to be filed by county and local health officers have been more satisfactory and show an increasing interest in health work. Reports have been received from seven of the eight county health officers and from 139 of the 184 town, borough and city health officers for the year 1918, and from one county health officer and 155 town, borough and city health officers in 1919.

Full-time health officers have been installed in New London and Waterbury at salaries of \$3,500 and \$4,500, respectively.

Registrars

Many of the 168 town registrars have shown an added interest in their work and the records are in most offices in excellent shape. A change could be made advantageous to all

concerned by the transmitting of original certificates to the state registrar as soon as recorded, instead of furnishing a certified card copy as is now required by law.

Coöperative Measures

As a member of the Milk Board, Embalmers Board, Infirmary Commission, and other state agencies, considerable work has been done to assist in furthering health measures not under the direct supervision of the department of health, and special effort has been made to coördinate the activities of the department of health with the various departments of the state government.

The same course has been pursued with unofficial organizations, state and national, and satisfactory arrangements have been made with the American Red Cross, National Tuberculosis and Nursing organizations, Interdepartmental Social Hygiene Board and state departments of health for coöordinating activities.

Reciprocal reporting of diseases by adjoining states has already resulted in averting a serious typhoid outbreak in this state.

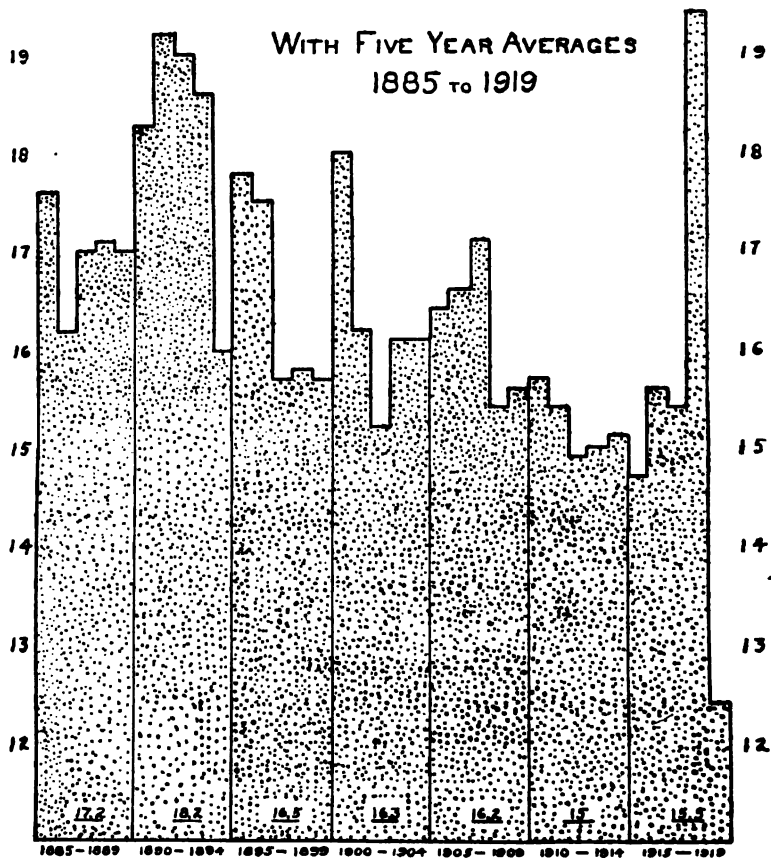
Conferences of the New England state health commissioners, State and Provincial Boards of Health and American Public Health Association have been attended and questions pertaining to state and Federal relations and intrastate matters have been given careful consideration.

State Infirmary

This matter was discussed in the last report, but as a member of the Infirmary Commission investigating this subject by the authority of the last Legislature, I am more than ever convinced of the great need for an institution of this character. It has been found that there are at least a thousand people in this state at the present time in urgent need of institutional care. Many of these have been refused admittance to existing institutions because of the chronic character of their complaint, or on account of institutional limitations. It has been necessary during the past year for the commissioner to direct the sending of two eighteen months' old infants to almshouses for shelter and treatment. It is hoped that the Legislature will see fit to give the report of this commission favorable consideration.

CONNECTICUT DEATH RATES

WITH FIVE YEAR AVERAGES
1885 TO 1919



HEALTH OF THE STATE

In reviewing the general health of the state for the two years 1918 and 1919, the extraordinary conditions which prevailed should be kept in mind. In 1918 the country was at war, and during the close of this year and the early months of 1919 raged the most destructive epidemic ever experienced by the state. The mortality for the year 1918 reflects these conditions with the death rate of 19.4, the highest rate for forty years. Offsetting this abnormally high record was a rate of 12.4 in 1919, the lowest ever recorded in the state. Had the 1918 rate prevailed in 1919, there would have been 10,248 more deaths recorded.

Total Deaths

1915-1919

Year	Population ¹	Deaths	Rate	U. S. ²	Mass.	N. Y.	R. I.
1915	1,241,314	18,274	14.7	13.3	14.5	14.6	14.8
1916	1,291,989	20,237	15.6	13.9	15.2	14.8	15.5
1917	1,354,930	20,836	15.4	14.0	15.0	14.7	15.3
1918	1,409,530	27,380	19.4	17.9	20.6	18.2	19.5
1919	1,464,360	18,253	12.4	12.9	13.1	13.2	13.4

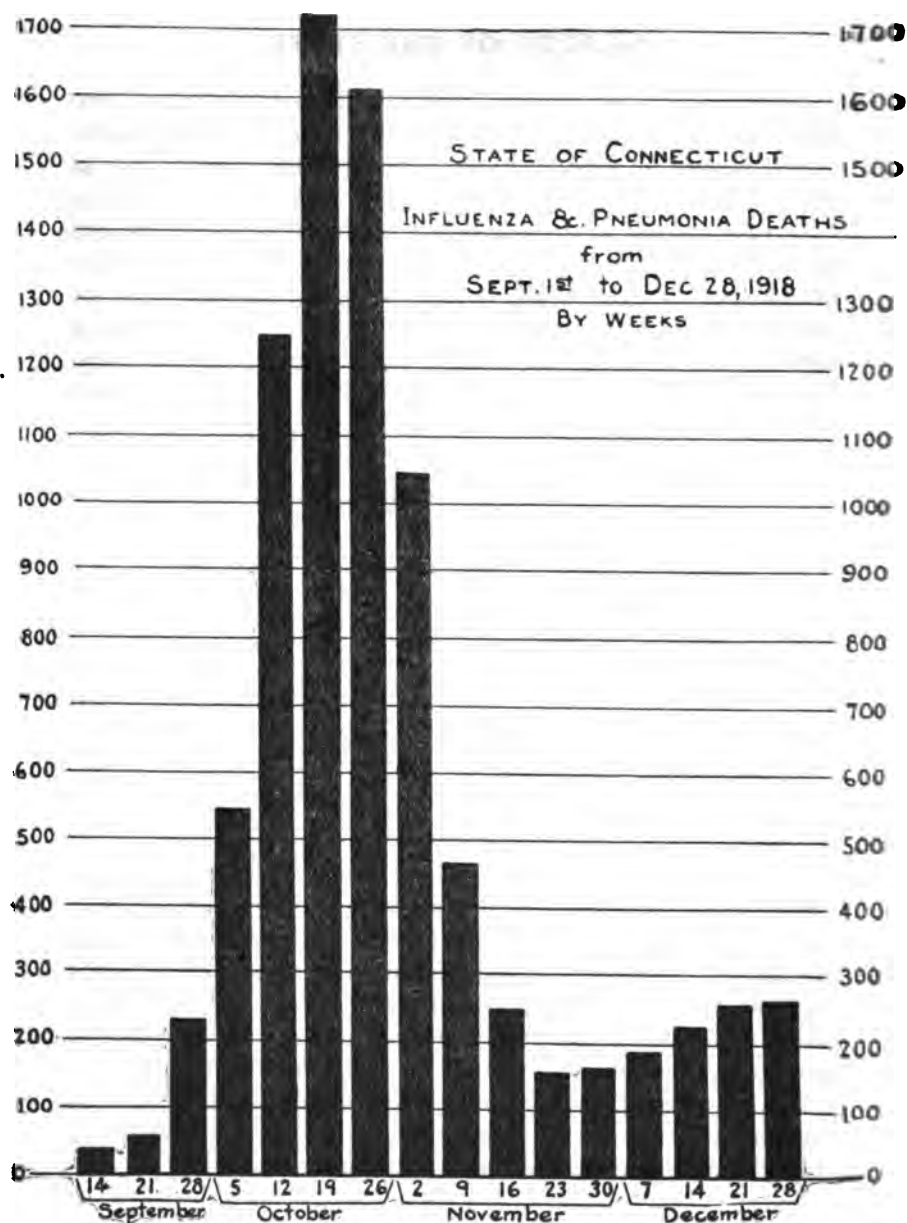
¹ Calculated from annual school census.

² U. S. Registration Area.

Influenza

The Influenza epidemic appeared early in October, 1918, and persisted with more or less severity for six months. During this time, several hundred thousand were afflicted and almost ten thousand people succumbed; while little could be done to stay the progress of the disease, the department secured fifty physicians and a hundred nurses and was thereby able to be of material assistance in caring for the afflicted.

The severity of the epidemic in this state as compared with the Registration Area of the United States and adjoining states is indicated by the following table:



INFLUENZA

Year	Deaths	Rate*	1915-1919			
			U. S.	Mass.	N. Y.	R. I.
1915	209	16.8	16.0	8.5	12.9	12.6
1916	526	40.7	26.4	18.3	19.2	26.5
1917	360	26.5	17.2	12.4	14.4	20.1
1918	7,602	539.3	298.9	337.0	214.4	343.9
1919	1,583	108.1	98.8	70.9	63.9	93.3

Typhoid Fever

Next to the general death rate, the prevalence of typhoid fever is accepted as an index of health and of the effectiveness of preventative measures. This disease which has been gradually reduced for several years, reached the low point of 3.8 in the year 1919. Particular attention has been given to typhoid fever by the department, and it is gratifying to note that the death rate for Connecticut is about one-third that of the Registration Area and compares favorably with adjoining states.

TYPHOID FEVER

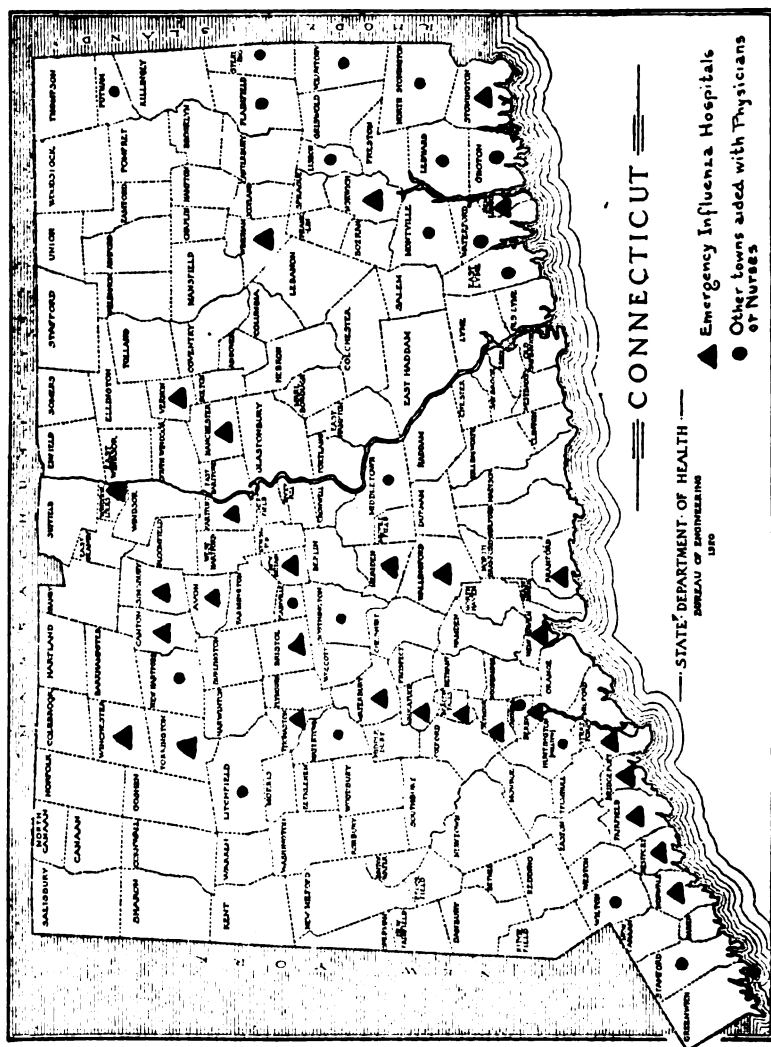
Year	Deaths	Rate	1915-1919			
			U. S.	Mass.	N. Y.	R. I.
1915	151	12.2	12.4	6.7	7.6	10.1
1916	94	7.3	13.3	4.7	5.9	6.8
1917	119	8.8	13.4	4.8	5.6	5.4
1918	74	5.2	12.5	4.0	5.5	5.3
1919	56	3.8	9.2	2.6	3.3	3.2

Tuberculosis

Regardless of the effort to control tuberculosis, this disease is still exacting a too heavy toll of deaths. The 1919 rate of 116.5 is encouraging, as compared with the rate of 147.7 for 1918. It is worthy of note that the Connecticut rate is considerably lower than that of the Registration Area and adjoining states.

The low rate of Connecticut as compared with other states, is probably due to a large extent to the excellent system of sanatoria and the tuberculin testing of cattle. The development of a broader program of publicity and of public health nursing will undoubtedly bring this rate much lower.

* All rates per 100,000 population.



TUBERCULOSIS—ALL FORMS

Year	Deaths	Rate	1915-1919			
			U. S.	Mass.	N. Y.	R. I.
1915	1,727	139.1	145.8	140.2	163.9	157.0
1916	1,795	138.9	141.6	147.4	155.1	166.7
1917	2,079	153.4	146.4	144.1	159.9	162.5
1918	2,064	146.4	149.1	156.7	160.7	169.4
1919	1,707	116.6	125.7	122.7	133.7	138.7

Pneumonia

Pneumonia has been progressively increasing for a number of years and has been the cause of considerable concern, but like tuberculosis it took a decided drop in the year 1919. When it is more generally recognized that pneumonia is a preventable disease and control measures are necessary, deaths from this cause will show a marked and permanent decrease.

PNEUMONIA—ALL FORMS

Year	Deaths	Rate	1915-1919			
			U. S.	Mass.	N. Y.	R. I.
1915	1,936	156.0	132.7	160.6	166.9	164.9
1916	2,553	197.6	137.3	173.0	161.9	159.0
1917	2,661	196.4	149.8	169.6	173.4	179.1
1918	2,991	212.2	284.3	379.2	358.1	291.8
1919	1,632	111.4	123.6	128.4	157.9	135.4

Venereal Diseases

While mortality statistics do not indicate the highly destructive effects of these diseases, it is well known that many of the deaths attributed to circulatory, nervous disorders and other conditions are the direct result of syphilis and gonorrhea. There were reported in the year 1919, 3,372 cases of these two diseases. Investigations to determine the probable number of existing cases, as compared with the reported cases, lead to the conclusion that at least ten thousand people contract one or the other of these diseases each year.

Smallpox

No deaths have occurred from smallpox during the past two years; 100 cases were reported during this period. It is pleasing to note that many communities are making vaccination compulsory for school attendance. The more generally this practice is observed, the less likelihood will there be of smallpox ever regaining a foothold.

Other Communicable Diseases

Diphtheria has been more prevalent than for many years; the death rate is higher although the case fatality rate is not so great. This disease demands and is receiving special consideration and study. Scarlet fever, measles, whooping cough, poliomyelitis and meningitis show slight changes as indicated in the following tables:

DIPHTHERIA

1915-1919						
Year	Deaths	Rate	U. S.	Mass.	N. Y.	R. I.
1915	195	15.7	15.7	20.0	17.4	16.4
1916	187	14.5	14.5	16.8	14.9	23.1
1917	234	17.3	16.5	22.1	16.8	24.6
1918	201	14.3	13.8	15.7	16.7	16.0
1919	253	17.3	14.7	14.7	19.0	19.4

SCARLET FEVER

1915-1919						
Year	Deaths	Rate	U. S.	Mass.	N. Y.	R. I.
1915	33	2.7	3.6	5.5	4.3	4.5
1916	30	2.3	3.3	3.5	2.0	5.0
1917	21	1.5	4.2	3.1	2.7	4.6
1918	36	2.6	3.0	2.0	3.0	3.9
1919	46	3.1	2.8	3.1	2.5	2.1

MEASLES

1915-1919						
Year	Deaths	Rate	U. S.	Mass.	N. Y.	R. I.
1915	54	4.4	5.4	7.4	8.8	10.0
1916	143	11.1	11.1	12.7	9.9	23.4
1917	126	9.3	14.3	10.0	9.0	11.8
1918	87	6.2	10.8	13.6	12.9	19.6
1919	100	6.8	3.9	4.7	3.4	2.5

WHOOPING COUGH

1915-1919

Year	Deaths	Rate	U. S.	Mass.	N. Y.	R. I.
1915	149	12.0	8.1	12.8	7.7	18.7
1916	161	12.5	10.2	10.7	7.8	7.7
1917	113	8.3	10.4	6.3	8.6	7.8
1918	279	19.8	16.8	18.0	11.8	24.6
1919	58	4.0	5.5	8.1	2.8	15.2

POLIOMYELITIS

1915-1919

Year	Deaths	Rate	U. S.	Mass.	N. Y.	R. I.
1915	10	0.8	1.0	1.1	0.7	1.2
1916	277	21.4	10.0	12.5	32.8	7.0
1917	16	1.2	1.6	1.3	1.1	1.1
1918	16	1.1	1.2	1.0	0.8	0.8
1919	10	0.7	...	0.4	0.3	0.2

MENINGITIS

1915-1919

Year	Deaths	Rate	U. S.	Mass.	N. Y.	R. I.
1915	57	4.6	7.4	7.8	7.0	7.1
1916	71	5.5	7.1	8.6	6.2	8.6
1917	188	13.9	8.9	8.3	6.5	10.0
1918	77	5.5	9.2	8.9	7.4	9.8
1919	45	3.1	6.6	7.2	...	3.2

Bubonic Plague

This disease is gradually spreading throughout the world and has invaded many of the Southern ports of the United States. It will undoubtedly reach the ports on the Atlantic seaboard regardless of the energetic efforts being made to retard its spread.

As this disease is transmitted by rats, it would be well to prepare for its invasion by at least requiring all new construction located within half a mile of waterways to be rat-proofed. Rat-proofing of buildings and wharves already constructed will necessarily be required when the disease appears and the cost of this work at such time is much greater than if done at the time of construction. Aside from the disease prevention value of rat-proofing, it is well worth while as an economic measure, for the destruction to property and food-stuffs by rodents amounts to millions of dollars annually.

Infant Mortality

Next to the total death rate and the typhoid fever rate comes the infant mortality rate as an index of the health of the state. The death rate of infants under one year of age for each thousand births was 106.9 in 1915 and 86.0 in 1919. These rates indicate that had the 1915 rate prevailed in 1919, 701 more deaths would have been recorded. *The saving to the state represented by these 701 babies is \$700,000, which is equivalent to the total expended by state and local health authorities and private health agencies combined for all health purposes.* (See page 29.)

INFANT MORTALITY

Year	Births	Deaths under 1 yr.	Rate	U. S.	Mass.	N. Y.	R. I.
			per 1,000 Births				
1915	32,725	3,499	106.9	100.0	101.0	99.0	120.0
1916	35,455	3,579	100.9	101.0	100.0	94.0	111.0
1917	37,571	3,466	92.3	94.0	97.9	91.4	108.0
1918	37,216	3,962	106.5*	101.0	113.0	97.0	126.0
1919	33,978	2,929	86.2	87.0	88.0	84.0	.....

Still Births

Closely connected with infant mortality is the problem of still births, at least half of which are preventable. Provision should be made for better control of midwives, education of expectant mothers and for proper medical attention.

STILL BIRTHS

Year	Births	1915-1919	Total	Per cent. of Total
		Still Births		
1915	32,725	1,249	33,974	3.7
1916	34,455	1,310	36,765	3.6
1917	37,571	1,238	38,809	3.2
1918	37,216	1,513	38,729	3.9
1919	33,978	1,265	35,243	3.6

Puerperal Diseases

The number of deaths from puerperal conditions is gradually increasing. It may be assumed that most puerperal deaths are preventable, and the measures suggested for the reduction of still births should reduce the deaths from this cause.

* High because of influenza deaths.

PUERPERAL DISEASES

1915-1919

Year	Deaths	Rate per 1,000
		Births and Still Births
1915	166	4.9
1916	155	4.2
1917	196	5.1
1918	176	4.5
1919	198	5.6

Cancer

While cancer shows a slight reduction in rate it is still high; 1,282 people died from this cause in 1919. Deaths from cancer are to a certain extent preventable, inasmuch as most cases of skin cancer are amenable to early treatment. A general program for impressing the public with this fact is being carried out.

CANCER

1915-1919

Year	Deaths	Rate	U. S.	Mass.	N. Y.	R. I.
1915	1,124	90.5	81.1	104.0	92.0	92.1
1916	1,152	89.2	81.8	109.2	92.0	92.6
1917	1,213	89.5	81.6	108.3	93.6	95.4
1918	1,254	89.0	79.8	107.2	93.2	89.4
1919	1,288	88.0	80.5	103.2	92.8	91.6

Accidents and Violence

The high death rate from accidents and violence during the years of the War dropped considerably in the year 1919. All accidental deaths are fundamentally preventable, and the Safety First movement introduced in many industrial establishments has been notably effective. The fact that almost one-fourth of the accidental deaths are the result of automobile accident deserves consideration.

ACCIDENTS AND VIOLENCE

Suicide excepted

1915-1919

Year	Deaths	Rate per 100,000	U. S.
1915	992	79.9	83.3
1916	1,229	95.1	90.9
1917	1,494	110.3	108.8
1918	1,283	91.0	100.6
1919	1,068	72.9	79.5

DEATHS FROM AUTOMOBILE ACCIDENTS

1907-1919														Unknown	Male	Female	Total
Year	Under 10	10 19	20 29	30 39	40 49	50 59	60 69	70 79	80 89	90 99							
1907	1	..	1	..	..	1	..	1	..	..	..	3	1	4			
1908	5	4	..	..	1	..	2	..	1	..	4	13	4	17			
1909	2	4	2	6	1	3	2	1	..	..	..	19	2	21			
1910	6	2	4	10	3	1	2	4	1	..	..	26	7	33			
1911	5	..	4	3	6	1	4	3	..	..	..	20	6	26			
1912	9	11	6	5	6	7	5	5	1	..	..	43	12	55			
1913	19	12	6	10	6	7	3	5	..	..	..	56	12	68			
1914	14	8	12	13	9	7	9	1	..	..	..	56	16	72			
1915	20	20	15	11	9	13	12	6	2	..	1	82	27	109			
1916	41	25	35	23	24	22	15	7	2	..	..	153	41	194			
1917	43	33	39	32	23	27	14	12	2	..	..	169	56	225			
1918	61	24	34	30	16	20	15	6	3	..	..	169	40	209			
1919	70	21	31	25	21	19	18	14	2	2	..	172	51	223			
Total	296	164	189	168	124	128	101	65	14	2	5	981	273	1267			

EVALUATION OF HEALTH STATISTICS

In submitting statistics and data indicative of health conditions, it is often difficult to fully appreciate the loss or gain represented by rates and percentages. The transposition of these into monetary values by standard methods of calculation will reveal in dollars and cents the economic profit and loss to the commonwealth.

Influenza

The calculated loss by death and disability in Connecticut from the Influenza epidemic is \$68,000,000.

The Preventable Loss

Table I indicates that the average annual loss by reason of preventable *deaths* during the last five years, excluding Influenza epidemic figures, has been \$21,000,000.

Table II shows the calculated annual loss from preventable *disability* to be \$22,000,000. Total preventable loss, \$43,000,000.

The Loss Prevented

Table III reveals the fact that the reduction in preventable deaths and disability in 1919 as compared with 1915, represents a saving of \$20,000,000.

With ample allowance for epidemic influences upon post-epidemic rates, the saving brought about by reason of health protective measures is at least \$10,000,000.

Prevention Costs

Table IV shows the total amount expended by public and private agencies in Connecticut for health conservation during the year 1919 was \$731,000.

The people of Connecticut have consequently been saved \$12.70 for every dollar expended for protective health work.

The total annual preventable loss represents a per capita loss of \$30.00. In an endeavor to eliminate this loss, the citizens of Connecticut are expending 50 cents per capita per annum, and of this sum the state contributes 15 cents.

TABLE I
LOSS—PREVENTABLE DEATHS

Average 1915-1919

Cause	Average annual deaths	Per cent. preventable	Deaths preventable	Economic valuation	Preventable loss
Typhoid fever	98	99	97	\$5,000	\$475,000
Diphtheria	214	90	193	1,000	193,000
Scarlet fever	33	85	28	1,000	28,000
Measles	102	70	71	500	35,500
Whooping cough	152	70	106	500	53,000
Poliomyelitis	66	50	33	1,000	33,000
Meningitis	87	70	61	500	30,500
Smallpox	.2	99	.2	3,000	600
Malaria	6	95	6	3,000	18,000
Tuberculosis, pulmon. .	1,608	80	1,286	5,000	6,430,000
Tuberculosis, other ..	251	80	201	3,000	603,000
Pneumonia, lobar	1,251	60	751	3,000	2,253,000
Influenza	365 ¹	70	255	4,000	1,020,000
Venereal	853 ²	90	768	3,000	2,304,000
<i>Total Communicable</i>	<i>5,086</i>	<i>76</i>	<i>3,856</i>		<i>\$13,476,600</i>
Diarrhoea, under 2 ...	904	70	633	500	316,500
Bronchitis-pneumonia. .	861	50	430	2,000	860,000
Cancer	1,205	15	180	2,000	360,000
Circulatory	2,587 ³	30	776	1,500	1,164,000
Nervous	1,923 ⁴	35	673	1,500	1,009,500
Puerperal	178	70	125	3,000	375,000
Violence	1,206	50	603	3,000	1,809,000
All other	5,349 ⁴	10	535	3,000	1,605,000
Total	19,299	40	7,811		\$20,975,600

¹ Excluding Influenza epidemic figures.

² Reported Cases plus 10% Circulatory and Nervous and 5% All Other.

³ Less 10% deducted and added to Venereal.

⁴ Less 5% deducted and added to Venereal.

TABLE II

LOSS—PREVENTABLE DISABILITY

Sickness and Accident

Loss in Income to Individuals

One-fourth population are wage-earners = 380,000

Average days lost yearly from preventable causes = 4

Average wage = \$3.00

$380,000 \times 4 \times 3 =$

\$4,260,000

Loss to Industry

It is accepted that the loss to industry in disorganization, idle overhead and lessened production is $2\frac{1}{2}$ times the wage loss.

$4,260,000 \times 2\frac{1}{2} =$

10,650,000

Medical Attendants

Two thousand physicians and surgeons with an average income of \$3,000 devote one-half of their time to treating preventable disability.

$2,000 \times 3,000 \times \frac{1}{2} =$

3,000,000

Nursing Service

Three thousand nurses with an average income of \$1,000 are half employed on cases of preventable disability.

$3,000 \times 1,000 \times \frac{1}{2} =$

1,500,000

Drugs and Accessories

1,400,000 people spend at least \$3 per capita for drugs, etc., one-third for relief of preventable conditions.

$1,400,000 \times 3 \times \frac{1}{3} =$

1,400,000

State Institutions (1919 Statistics)

Tuberculosis Sanatoria, = \$604,000

Humane institutions—one-half for care of those afflicted with or suffering as a result of preventable illness.

$2,700,000 \times \frac{1}{2} + 604,000 =$

1,954,000

Total annual loss preventable disability

\$22,764,000

NOTE.—The Compensation Commissioners have awarded in two years \$4,855,000, for injuries to those coming within the compensation law; as this represents the loss occasioned by accidental injuries to employees of larger industries only, it is evident that the above estimates are conservative.

TABLE III
THE LOSS PREVENTED
 1919 compared with 1915

Deaths

Had the death rate of 1915 existed in 1919, 3,272 more deaths would have been recorded. Evaluation of these lives by the method used in Table I represents a saving of \$9,816,000

Disability

Table II shows that the loss from preventable disability is about equal to the loss from preventable death; therefore, the saving from reduced illness and accident in 1919 was \$9,816,000

Total Loss Prevented, 1919

The actual saving in preventable death and disability in 1919 is in round numbers \$20,000,000, but as this year followed the disastrous influenza epidemic, it would be fair, before assuming that this sum represents the results of efforts to conserve public health, to make certain deduction for deaths occasioned by Influenza which would have otherwise occurred in the year 1919. It being impossible to determine this figure with any degree of accuracy, the generous allowance of 50 per cent. will be made, leaving as the saving to the people of Connecticut by reason of conservation measures the sum of \$10,000,000

A large part of the saving from preventable illness and death as represented in the above table can be accounted for by five groups, the following indicating the saving from these in lives and dollars in 1919 as compared with 1915:

	Lives	Dollars
Typhoid fever	123	\$1,230,000
Tuberculosis, pulmonary	339	3,390,000
Pneumonia, lobar	654	3,924,000
Accidents and violence	103	618,000
Infant deaths under 1 year	701	701,000

TABLE IV
COST—PREVENTION WORK

Connecticut, 1919*

State Department of Health	\$148,000
County Health Officers	12,000
Dairy and Food Commission	32,000
Factory Inspection Department	24,000
Local Health Departments	290,000
School Inspection (part estimate)	75,000
Volunteer Nursing and Health agencies (estimate ½)	150,000
Total expended for health work	\$731,000

* From reports of Comptroller and Health Officers, for fiscal year ending June 30, 1920.

Per Capita Expenditures

	Cents
State Department of Health	10.5
Other State departments	4.5
Total State government	15.0
Local Health departments	20.0
Local School inspection	5.0
Total Local government	25.0
Volunteer Health and Nursing agencies	10.0
Total, official and unofficial agencies	50.0

NOTE.—Tuberculosis sanatoria and isolation hospitals have not been included in the above table for the reason that they are primarily intended for the care of non-prevented cases, although it is well recognized that they do aid in reducing the number of deaths.

DEPARTMENT EXPENDITURES

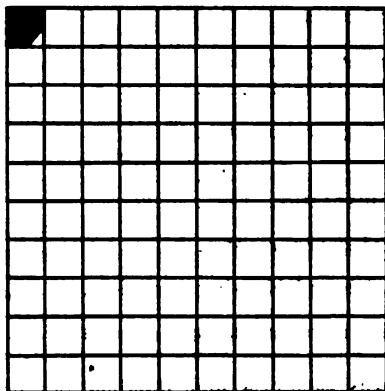
The State Board of Health in 1915 expended the sum of \$22,000 and the State Department of Health for the fiscal year ending June 30, 1920, expended \$148,000, an increase of from 2 to 10 cents per capita.

The activities of 1919 as compared with those of 1915, and the results obtained, are sufficient to warrant the increased expenditure. The sum of \$148,000 may in itself appear large, and as the proposed budget represents twice this amount, the following graphic presentations are submitted to show the relatively small amount expended for state health work.

1919

Total State Expenditures, \$17,000,000

(Large Square)



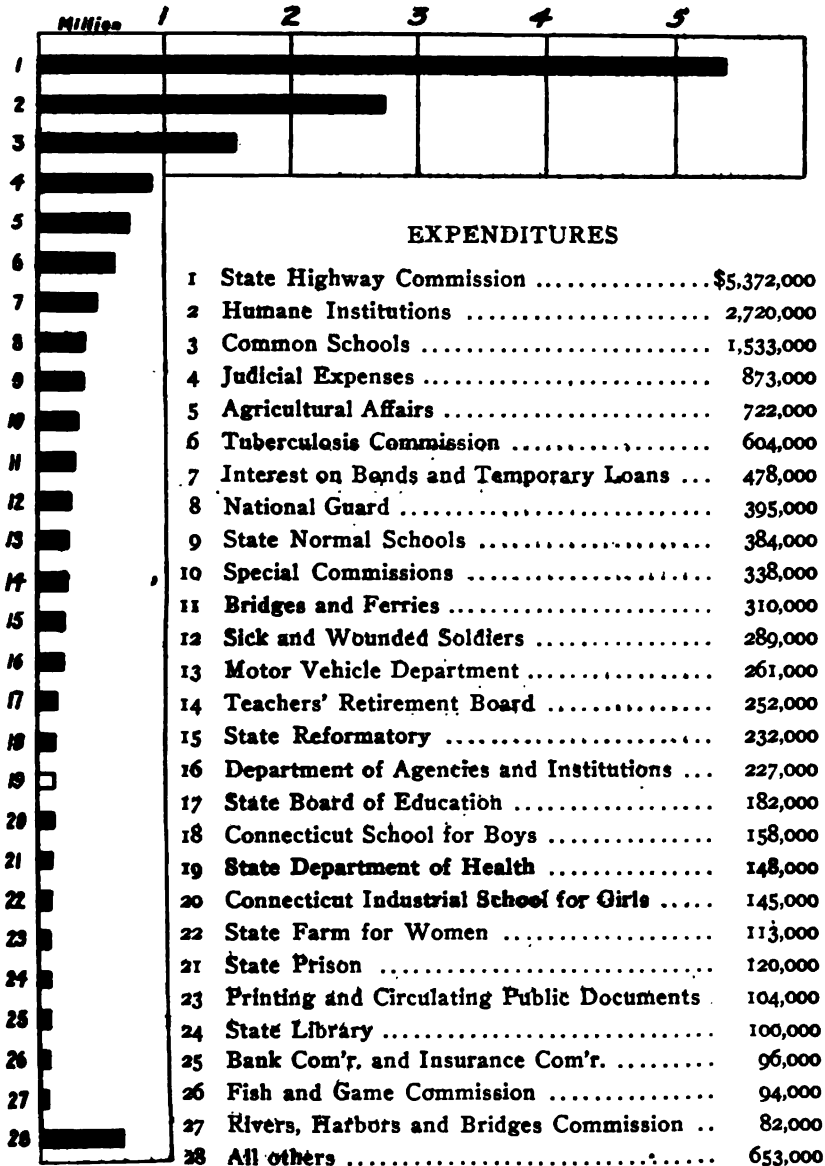
Department of Health Expenditures, \$148,000

(Part of Small Square)

Of every dollar expended by the State, the Health Department spends seven-eighths of a cent.

RELATIVE EXPENDITURES — STATE AGENCIES

Year Ending June 30, 1930



RECOMMENDATIONS AND BUDGET

It is recommended:

1. That Public Health Nursing, Mental Hygiene, and Publicity and Education be made distinct bureaus by legislative act.
2. That the Medical Practice Act be revised.
3. That authority be given for direct supervision of midwives.
4. That provision be made for safeguarding Vital Statistics records now in the custody of the State.
5. That the Vital Statistics law be amended to provide for the filing of original certificates with the State Registrar.
6. That a State Infirmary or other institution be established for the care of the chronic and neglected sick.
7. That appropriations be made for the next fiscal period for the State Department of Health in accordance with the estimated operating costs submitted.

STATE DEPARTMENT OF HEALTH

Estimated Operating Cost for One Year

1	General Administration	\$29,750
2	Preventable Diseases	21,250
3	Vital Statistics	21,300
4	Child Hygiene	19,950
5	Laboratory	33,000
6	Sanitary Engineering	29,900
7	Antitoxin	16,000
8	Industrial Wastes	29,500
9	Venereal Diseases	16,150
10	Public Health Nursing	13,500
11	Mental Hygiene	6,525
12	Salary Commissioner	7,500
		\$244,325

Laboratory Construction 100,000

I am submitting the financial statement of the Department of Health and the reports of the directors of Bureaus of the Department, with such additional data as it seems desirable to record.

Respectfully,

JOHN T. BLACK, M.D.,
Commissioner of Health.

FINANCIAL STATEMENT
STATE DEPARTMENT OF HEALTH

1919

Oct. 1, 1918 to June 30, 1919.

1920

July 1, 1919 to June 30, 1920

EXPENDITURES FOR FISCAL PERIOD ENDING JUNE 30, 1919

	1918	1919	1919	Fiscal Period
	Oct. 1-Dec. 31	Jan. 1-Mar. 31	Apr. 1-June 30	
General Expenses:				
Administration	\$2,640.83	\$2,102.84	\$5,104.85	\$ 9,848.52
Preventable Disease	1,483.93	2,044.62	2,996.35	6,524.90
Vital Statistics	2,439.20	3,482.80	3,820.59	9,742.59
Engineering	546.76	764.35	1,378.83	2,689.94
Influenza Special	6,178.64	293.12	7.00	6,478.76
Venereal Disease	468.43	108.00	1,234.12	1,802.55
New London District	687.98	255.00	80.46	1,023.44
Laboratory	4,446.54	3,042.22	6,184.06	14,572.82
Antitoxin	71.12	25.00	8,344.91	8,441.03
Spring and Bottled Water	10.85	.....	319.54	330.39
Industrial Wastes	5,589.08	4,772.93	2,522.97	12,885.98
Total	\$24,563.36	\$17,783.88	\$31,993.68	\$74,340.92

EXPENDITURES

1919

RECEIPTS**Paid to State Treasurer****Oct. 1, 1919-June 30, 1919**

1918		
Oct. 1	Bottled water license fees	\$ 499.60
	Federal Social Hygiene Board	12,120.57
1919		
Feb. 28	Insurance, automobile	122.56
May 2	Refund influenza nurses	143.48
	Total	\$12,806.61

RECEIPTS**Paid to the Commissioner****Oct. 1, 1919-June 30, 1919**

State Comptroller, salary 9 months	\$3,000.00
U. S. Public Health, salary 9 months	350.00
U. S. Children's Bureau, salary 9 months	.75
Embalmer's Board, fees 9 months	15.00
Total	\$3,315.75

EXPENDITURES FOR FISCAL PERIOD ENDING JUNE 30, 1920

	1919		1920		1920	
	July 1-Sept. 30	Oct. 1-Dec. 31	Jan. 1-Mar. 31	Apr. 1-June 30	Fiscal Period	
General Administration	\$3,648.94	\$6,002.37	\$4,920.74	\$2,511.33	\$17,083.38	
Vital Statistics	2,871.57	3,793.18	4,791.54	2,565.89	14,022.18	
Preventable Disease	2,380.90	5,575.61	2,603.93	2,753.25	13,313.69	
Child Hygiene	1,785.09	2,015.25	2,387.51	2,488.13	8,675.98	
Laboratory	6,099.42	6,018.74	5,792.76	5,611.29	23,522.21	
Engineering	1,715.58	1,659.23	2,168.68	3,371.93	8,915.42	
Industrial Wastes	6,276.32	4,928.71	4,900.39	5,459.65	21,565.07	
Antitoxin	541.40	2,615.42	4,731.91	5,650.17	13,538.91	
Veneral Disease	4,345.63	3,894.91	6,645.52	4,763.61	19,649.67	
Laboratory Construction	869.28	1,458.04	15.84	1,000.00	3,303.16	
Total	\$30,494.13	\$37,851.46	\$38,958.82	\$35,175.25	\$143,589.66	

EXPENDITURES

1920

FINANCIAL STATEMENT

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CLASSIFIED FINANCIAL STATEMENT

July 1, 1919 to June 30, 1920

	Adminis- tration	Preventable Diseases	Vital Statistics	Child Hygiene	Laboratory	Engineering	Industrial Wastes	Veneral Diseases	Antitoxin	Laboratory Construction
APPROPRIATIONS	\$36,000.00	\$22,000.00	\$20,000.00	\$25,000.00	\$40,000.00	\$20,000.00	\$30,000.00	\$24,000.00	\$20,000.00	\$100,000.00
Additions	.....	.....	.....	.....	.....	.....	.....	12,656.17	.....	.....
Total	\$36,000.00	\$22,000.00	\$20,000.00	\$25,000.00	\$40,000.00	\$20,000.00	\$30,000.00	\$36,656.17	\$20,000.00	\$100,000.00
EXPENDITURES:										
Salaries	\$7,261.21	\$6,223.85	\$8,494.60	\$4,682.47	\$13,891.78	\$3,471.28	\$13,951.94	\$13,348.44	\$ 150.00	\$2,232.04
Traveling Expenses	1,856.01	850.30	230.94	777.45	.....	848.88	1,906.80	985.99	77.44	50.34
Auto Purchase and Exp.	4,004.93	2,672.80	.....	731.57	665.52	938.16	3,126.72	.....	.....	.....
Equipment	327.87	225.00	398.00	374.95	1,822.43	273.27	308.51	1,299.05	.....	.....
Printing	1,660.97	1,312.20	1,495.76	1,131.39	1,207.40	381.45	93.25	461.60	37.50	.....
Postage and Express	276.70	436.00	260.98	126.50	1,600.00	60.00	.....	.....	120.00	.....
Supplies	208.41	281.89	1,660.23	62.30	2,243.75	114.87	910.84	2,312.38	12,117.96	.....
Telephone and Wire	120.46	53.87	82.67	98.05	443.81	79.74	23.53	17.85	.....	.....
Light	25.54	.....	52.75	7.30	277.40	20.57	101.31	.....	.....	.....
Service and Janitor	22.55	.....	26.70	28.00	33.75	20.70	16.70	.....	.....	.....
Rent and Insurance	700.30	200.00	520.00	420.87	344.56	920.00	420.00	.....	.....	.....
Miscellaneous	470.43	157.84	859.15	235.13	991.81	186.10	695.77	1,693.06	26.00	1,020.78
Total	\$17,082.38	\$12,213.69	\$14,022.18	\$8,675.98	\$23,522.21	\$6,915.42	\$21,565.07	\$19,649.67	\$13,538.90	\$3,303.16
BALANCE, July 1, 1920	\$8,916.62	\$8,686.31	\$5,977.82	\$16,324.02	\$16,477.79	\$11,084.58	\$28,434.93	\$17,006.50	\$6,461.10	\$96,696.84

CLASSIFIED EXPENDI- TURES 1920

RECEIPTS**Paid to State Treasurer****July 1, 1919-June 30, 1920**

1919		
July 7	Sale of automobile	\$ 275.00
July 11	Sale of automobile	250.00
Sept. 18	Bottled water license fees	420.00
Oct. 5	Refund film showing	33.00
Oct. 30	Refund Federal Soc. Hyg. Board	947.41
1920		
Mar. 19	Refunds and adjustments	37.81
Mar. 30	Refund Federal Soc. Hyg. Board	3,150.93
Apr. 26	Insurance, New London Clinic	656.17
Apr. 26	Refund, New Haven (V. D. Acct.)	80.15
May 5	Refund, laboratory supplies	83.90
May 17	Sale of automobile	800.60
May 17	Sale of automobile	400.00
June 30	Refund Federal Soc. Hyg. Board	7,901.66
Total		\$15,036.03

RECEIPTS**Paid to the Commissioner****July 1, 1919-June 30, 1920**

State Comptroller, salary 12 months	\$4,000.00
U. S. Public Health Service, salary 12 months	300.00
U. S. Census Bureau, salary 12 months	12.00
U. S. Children's Bureau, salary 12 months	1.00
Embalmer's Board, fees 12 months	20.00
Total	\$4,333.00

SPECIAL ACCOUNTS

Medical Practice July 1, 1919-June 30, 1920

Balance in bank, July 1, 1919	\$464.80	
License fees, 113 at \$2	226.00	
		\$690.80
Expenditures (see vouchers):		
Printing	\$158.00	
Engrossing	52.50	
Town clerk's fees	28.25	\$238.75
Balance, June 30, 1920	452.05	
		<u>\$690.80</u>

Chiropody Fund July 1, 1919-June 30, 1920

Balance in bank, July 1, 1919	\$6.00	
License fees, 3 at \$2	6.00	
		\$12.00
Balance, June 30, 1920	\$12.00	
		<u>\$12.00</u>

Bottled Water Licenses August 1, 1919-July 31, 1920

Balance in bank, Aug. 1	\$420.00	
License fees, 18 at \$10	180.00	
Renewal fees, 49 at \$5	245.00	
		\$845.00
Paid to State Treasurer	\$420.00	
Balance, July 31, 1920	425.00	
		<u>\$845.00</u>

Transcripts July 1, 1919-June 30, 1920

For transcribing 55,361 certificates (U. S. Census Bureau)	\$1,660.83	
		\$1,660.83
Expenditures (see vouchers):		
Salaries transcribing clerks	\$1,710.83	
Deficit	50.00	
		<u>\$1,660.83</u>

REPORT OF THE PUBLIC HEALTH COUNCIL

To His Excellency, The Governor, State Capitol, Hartford, Connecticut:

Sir:—The Public Health Council has the honor to submit its second report in accordance with Section 2363 of the General Statutes, this report being for a period of twenty-one months from October 1, 1918, to June 30, 1920.

During this period the Council has held twenty regular meetings in addition to a large number of committee meetings and hearings. Mr. R. A. Cairns, of Waterbury, and Mr. James A. Newlands, of Hartford, were appointed by Your Excellency on July 1, 1919, to succeed themselves, and Dr. H. P. Mansfield, of Ridgefield, was appointed April 1, 1920, to succeed Dr. Walter Brown, of Bridgeport, resigned.

The Public Health Council is by statute primarily an advisory body and as such it has, during the period of this report, been called upon to advise on many important problems occasioned by the War and post-war conditions. Among these might be mentioned the coördination of the work of the Department with Federal and semi-official War agencies, emergencies arising from the feverish activity of industry, prejudicial conditions due to transportation difficulties and last, but not least, invasion by disease. The Department of Health was practically in its infancy when called upon to meet these emergencies, as its organization had been authorized only the year before. Additional handicaps developed in high costs and inability to readily secure skilled personnel; however, steady progress has been made in the development of an organization which we believe to be efficient and creditable to the State.

At the present time, a temporary curtailment of the activities of the Department is effective for the reason that in submitting estimates for the present fiscal period, it was not anticipated that average costs would increase about 40 per cent. It is felt that this is an unfortunate situation, for it has been clearly demonstrated that morbidity and mortality rates are influenced by the amounts expended for health administration.

It is quite necessary that the State Department of Health, being required to give expert advice and opinions in the name of the State; should have a personnel above the average in ability and experience. There are well-qualified men in the Department; many, however, have left to secure compensation commensurate with their ability. The State cannot be in the position of training scientific workers for commercial enterprise. This situation has been kept in mind in the preparation of the budget for the ensuing fiscal period.

A detailed review of health conditions in the state will be found in the Commissioner's report, but there are outstanding features which deserve comment and which suggest the wisdom of sustaining health measures.

The death rate for the State has been reduced from 14.8 in 1915 to 12.4 in 1919, while the rate for the Registration Area of the United States for 1919 is 12.9, as compared with 12.4 for Connecticut. These rates indicate that approximately 2,000 deaths were prevented in the year 1919 and that it is safer to live in Connecticut than in the average Registration Area state.

Special effort has been made looking to the control of typhoid fever and the reduction in deaths from 151 to 56 indicates some success. Comparing the typhoid fever death rate in Connecticut for 1919, which was 3.8, with that of the Registration Area, which was 9.2, the results are exceedingly gratifying.

Energetic Child Welfare and Public Health Nursing work is also reflected in statistics. Out of every 1,000 babies born last year, but 86 died. This is 20 less than five years ago and means that of the babies born this year, 700 are living who would have been dead had they been born under conditions as they were five years ago.

Other communicable diseases which have received less consideration show in most instances slight, if any, improvement in the death rate.

The influenza epidemic mentioned in our last report was the most severe and disastrous of recent years. There was little the Department of Health could do to stay its progress and most of the Department's efforts were devoted to relief work. Influenza and pneumonia during the winter of 1918

caused the deaths of 10,000 people. The disease re-appeared in milder form in the winter of 1919 with 1,000 deaths resulting. Epidemics of this character are fortunately rare.

Bubonic plague, a slowly progressing disease, but one hard to eradicate when it has once invaded a locality, is in several Southern sea-coast cities. It seems prudent that Connecticut as a state, or by its several cities, should prepare for the possibility of the invasion of this disease by instituting rat-proofing measures.

The Council desires to recommend the establishment of a State Infirmary or other institution for incurables and diseases or afflictions which cannot be provided for by other institutions for lack of room or failure to qualify.

The Council's recommendations for the administrative work of the Department of Health are expressed in the budget submitted.

STATE DEPARTMENT OF HEALTH

Estimates 1921-1923

1	General Administration	\$ 56,500
2	Preventable Diseases	40,400
3	Vital Statistics	42,600
4	Child Hygiene	36,000
5	Laboratory	66,000
6	Sanitary Engineering	56,800
7	Antitoxin	32,000
8	Industrial Wastes	59,000
9	Veneral Diseases	32,300
10	Public Health Nursing	25,600
11	Mental Hygiene	12,400
12	Salary Commissioner	15,000
13	Laboratory Construction	100,000

Respectfully,

(Signed) E. K. Root, M.D.,
Secretary.

December 10, 1920,
Hartford, Connecticut.

**REPORT OF BUREAU OF PREVENTABLE
DISEASES**

THE UNIVERSITY OF CHICAGO
CHICAGO, ILL.

REPORT OF BUREAU OF PREVENTABLE DISEASES

*John T. Black, M.D., State Commissioner of Health, Hartford,
Connecticut.*

Sir:—I submit herewith the following report for the Bureau of Preventable Diseases for the years 1918 and 1919. This biennial report covers a two-year period, during which Dr. T. Eben Reeks was Director of the Bureau of Preventable Diseases and under whom the work mentioned in this report was accomplished. I am indebted to Dr. Reeks for his courtesy in furnishing the material for this report.

The report is made up in three parts: first, a general statement of the work of the Bureau with a summary of communicable diseases reported during the two-year period; second, detailed reports of conditions and investigations of the most important communicable diseases with comparative tables; and, third, an appendix of special reports and tables.

Yearly Statistics

All statistics given are for the calendar year and not for the fiscal year. It has been necessary to do a considerable amount of work on back years, but it was felt that yearly totals should be on a January 1 to December 31 basis, rather than that of a constantly changing fiscal year. This will also make the statistics more comparable with those of other states.

Population

The populations used in this report are those computed from the official school census of the state taken each year. The great influx of people during the war to munition manufacturing centers so increased the population of these places as to make the population estimates based on the United States Census of 1910 practically useless in calculating rates which would indicate health conditions with any degree of accuracy.

The population of Connecticut as estimated from the United States Census Bureau statistics is for the year 1915, 1,225,339, and when estimated from the Connecticut school census, 1,241,314. These figures show that the population as calculated by the school census compares favorably with the Federal Census for a normal year and justifies the use of the school census from 1915 to 1919 in this report.

General Discussion

The year 1918 was the first full year of the existence of the Bureau of Preventable Diseases, and much of the work of the Bureau consisted in establishing systematic daily reporting of cases of disease, the preparation of pamphlets of instruction, introduction of systems for office records, and the preparation of Chapter I of the State Sanitary Code.

Many visits were made to health officers, some upon request, and others upon our own initiative to bring about a better understanding for the reporting of diseases by physicians and by the health officers to this Bureau. For many years health officers had been accustomed to report communicable diseases at the end of the month; many reported only the initial case in a family, and as the law did not specifically designate all the diseases to be reported, it can be understood that morbidity reporting needed considerable attention. The Sanitary Code now indicates specifically the diseases to be reported and requires the health officer to make a daily report of all diseases coming to his attention.

The frequent transmission of disease from one town to another and the possible infection of milk produced in one town and sold in another made daily reporting necessary. Being constantly informed of the diseases prevalent throughout the state, the State Department is in a position to advise or warn towns or communities likely to be invaded and thereby prevent considerable unnecessary illness.

The effect of the attention given to the reporting of diseases can be readily seen by comparing the reported cases and death rates of many of the diseases, and so great has been the improvement that unless such comparisons are made, a study of the reported diseases alone for the past five years will be quite misleading.

Before taking up the discussion of the prevalence of disease, it is desired to express our appreciation of the interest and spirit of cooperation shown by many health officers throughout the state. Many of them are busy physicians, serving as part-time health officers without adequate compensation for their services.

We have heard little or no complaint on this score, but are aware of the fact that but few health officers make any charge for time devoted to clerical service, although most of them receive fair remuneration for field work.

It is as important to the health of a town to have its health records well kept and preserved for future reference as it is to rid the town of many common nuisances.

A case in mind sustaining this statement is one where a search was being made for the source of infection of a typhoid fever patient. It was impossible to determine the source because of the single infection, but by reference to the records of the town

it was found that an employee on the farm lived at other places in the town in previous years, where typhoid fever had occurred. This farm hand was immediately suspected, and later proven, to be a carrier.

The records in this case were doubtless the means of locating this typhoid carrier and preventing subsequent infections.

There were 127,798 cases of communicable diseases reported during the calendar year in 1918 and 31,919 in 1919. Of these totals there were reported 105,056 cases of influenza in 1918 and 10,664 cases in 1919. During the influenza epidemic it was necessary to secure a large number of physicians and nurses to assist, and for six months in 1918 and 1919 little work was done outside of influenza control measures. A special report on this epidemic will be found in the third section of this report.

Notwithstanding the increased population of the state for the years 1918 and 1919 over that of 1917, and the greater effort on the part of the department to secure full reports of typhoid fever for purposes of investigation, the number of cases reported for the year 1918 shows a decrease of 65 cases for the year 1918 compared with the year 1917, and a further decrease in 1919.

The large increase in reported cases of venereal diseases should be noted, which reporting has been the result of stimulation by this Bureau. To secure this result it has been necessary to meet the physicians of the state individually and in medical societies and explain the value of reports for the welfare of the state.

The following table presents the number of cases reported during the years 1918 and 1919 as compared with the previous three years. It will be seen that certain diseases were not reportable until 1918, accounting in part for the great increase in the total number of cases of disease reported during the period covered by this report.

While the table shows a marked increase in the number of cases of several of the diseases tabulated, it is not possible, with few exceptions, to comment upon the increase because of the relatively incomplete reports obtained by the system of reporting of former years. A study of the fatality rates again indicates that the increase in most cases is apparent and not real, the fatality rate showing very little variation. As an example, the increased number of cases of pulmonary tuberculosis, namely, 1821 for 1918 against 1795 for 1917, is not in accord with the death rate for this disease for the two years. The exception to the incomplete reporting of disease is to be noted in that of typhoid fever, diphtheria and smallpox. The reason for this is partly due to the use of the state laboratory by physicians in confirming their diagnosis of typhoid fever and in the case of diphtheria, by the distribution by the state of antitoxin.

PREVENTABLE DISEASES REPORTED FOR THE PERIOD

Disease	1915-1919				
	1915	1916	1917	1918	1919
Anthrax	..	1	1	..	1
Cerebrospinal Meningitis	35	73	312	117	44
Chickenpox	..	28	156	760	1,350
Conjunctivitis Inf.	12	9	8	28	108
Diphtheria	2,161	1,870	2,367	2,348	3,388
Dysentery, bacillary	..	..	..	5	5
Favus	..	..	..	5	11
German Measles	..	..	..	1,723	99
Glanders	..	2	..	..	..
Influenza	..	..	..	105,056	10,664
Leprosy	..	1	..	2	1
Malaria	..	..	..	4	8
Measles	3,481	10,426	7,462	5,450	5,884
Mumps	..	34	510	1,552	335
Paratyphoid Fever	..	..	..	13	18
Pellagra	..	1	7	1	1
Pneumonia (lobar)	..	..	..	2,256	545
Poliomyelitis	35	951	29	51	12
Rabies	..	..	4	2	..
Scarlet Fever	1,641	1,181	1,528	1,550	2,663
Septic Sore Throat	..	48	11	113	24
Smallpox	22	52	423	94	6
Tetanus	..	..	..	4	4
Trachoma	..	..	5	10	5
Tuberculosis (pul.)	2,015	2,016	1,795	1,821	1,640
Tuberculosis (other forms) ..	..	..	..	346	420
Typhoid Fever	981	538	508	443	415
Typhus Fever	..	..	..	1	..
Whooping Cough	1,164	1,886	1,911	2,836	904
Gonorrhoea	26	443	258	828	1,350
Syphilis	13	149	104	379	2,014
	11,586	19,709	17,399	127,797	31,919

Typhoid Fever

As previously stated, typhoid fever has received special attention since the formation of this Bureau, particular effort being made to study outbreaks, to ascertain their origin, and to discover carriers of the disease. With the limited personnel for field work, progress has not been rapid, but the reduction of the typhoid death rate from 12.2 in 1915 to 3.8 in 1919 is indicative of the value of sustained effort to diminish the prevalence of this disease.

A number of carriers have been located and are kept under observation.

The following morbidity and mortality tables indicate the prevalence of typhoid fever for the past five years and show the comparison with the United States Registration Area and nearby states:

(Typhoid discussion continued on page 97)

TYPHOID FEVER

Year	Population	Cases	Deaths	Morbidity Rate (per 100,000)	Fatality Rate (per cent. re- ported cases)
1915	1,241,314	981	151	79.0	15.4
1916	1,291,989	538	94	41.6	17.5
1917	1,354,930	508	119	37.5	23.4
1918	1,409,530	443	74	31.4	16.7
1919	1,464,360	415	56	28.3	13.5

Deaths and Mortality Rates

Year	Deaths	Rate	U. S.	Mass.	N. Y.	R. I.
1915	151	12.2	12.4	6.7	7.6	10.1
1916	94	7.3	13.3	4.7	5.9	6.8
1917	119	8.8	13.4	4.8	5.6	5.4
1918	74	5.2	12.5	4.0	5.5	5.3
1919	56	3.8	9.2	2.6	3.3	3.2

A third table shows the distribution of typhoid fever by age groups and by sex for the years 1918 and 1919, and this table is of particular interest as it apparently shows the effect of vaccination upon the male population of military age:

TYPHOID FEVER CASES BY AGE GROUPS IN 1918-1919

Age Group (Years)	Male		Female		Both Sexes	
	Cases	Per Cent. of Male Total	Cases	Per Cent. of Female Total	Cases	Per Cent. of Total Cases
0-4	8	3.3	3	1.8	11	2.7
5-9	21	8.6	14	8.3	35	8.5
10-14	27	11.1	28	16.6	55	13.3
15-19	35	14.3	22	13.0	57	13.8
20-24	35	14.3	23	13.6	58	14.0
25-29	30	12.3	28	16.6	58	14.0
30-34	38	15.6	20	11.8	58	14.0
35-39	16	6.6	12	7.1	28	6.8
40-44	12	4.9	6	3.5	18	4.4
45-49	8	3.3	6	3.5	14	3.4
50-54	3	1.2	4	2.4	7	1.7
55-59	3	1.2	2	1.2	5	1.2
60 and over	8	3.3	1	0.6	9	2.2
Totals	244	100.0	169	100.0	413*	100.0
1919						
0-4	3	1.5	7	5.2	10	3.0
5-9	31	15.7	14	10.3	45	13.5
10-14	34	17.2	13	9.6	47	14.1
15-19	35	17.7	23	16.9	58	17.3
20-24	15	7.6	24	17.7	39	11.7
25-29	16	8.1	22	16.2	38	11.3
30-34	14	7.1	6	4.4	20	6.0
35-39	19	9.6	8	5.9	27	8.1
40-44	10	5.0	4	2.9	14	4.2
45-49	10	5.0	4	2.9	14	4.2
50-54	5	2.5	4	2.9	9	2.7
55-59	1	0.5	4	2.9	5	1.5
60 and over	5	2.5	3	2.2	8	2.4
Totals	198	100.0	136	100.0	334*	100.0

*There were 30 cases in 1918 and 81 cases in 1919 where the age or sex was not stated on the daily cards.

CASES AND DEATHS FROM

1918 New Haven County	Typhoid Fever		Measles		Scarlet Fever		Whooping Cough		Diphtheria		Influenza		Chicken Pox	
	C. (1)	D.	C. (6)	D.	C. (7)	D.	C. (8)	D.	C. (9)	D.	C. (10)	D.	C. (19-A)	D.
Ansonia	4	—	10	1	10	—	11	2	1	—	1,657	118	6	—
Beacon Falls	—	—	—	—	—	—	4	—	6	—	75	10	—	1
Bethany	—	—	—	—	—	—	—	—	—	—	76	2	—	—
Branford	—	—	83	1	1	—	22	5	3	—	846	33	18	—
Cheshire	—	—	10	2	5	—	—	—	—	—	495	6	—	—
Derby	3	3	7	—	1	—	—	—	20	4	2,405	129	—	—
East Haven	—	—	—	—	2	—	11	2	1	7	191	19	1	—
Guilford	5	3	2	1	1	—	20	2	2	—	372	5	—	—
Hamden	—	1	70	—	6	—	29	—	10	—	635	33	6	—
Madison	1	—	9	—	—	—	32	—	—	—	72	2	12	—
Meriden	14	1	41	4	86	3	8	12	81	—	2,634	271	—	—
Middlebury	—	—	1	—	—	—	—	—	3	—	100	1	—	—
Milford	2	—	169	—	1	—	34	—	1	—	247	25	1	—
Naugatuck	3	—	6	—	6	—	3	3	10	3	33	114	—	—
New Haven	72	8	442	10	62	3	547	44	209	20	5,179	839	5	1
North Branford	—	—	—	—	—	—	—	—	—	—	—	—	—	—
North Haven	4	—	2	—	2	—	19	—	—	—	415	14	8	—
Orange	2	1	36	—	13	—	27	4	8	—	228	64	4	—
Oxford	—	—	2	—	9	—	1	—	1	—	—	3	—	—
Prospect	—	—	—	—	—	—	—	—	1	—	14	1	3	—
Seymour	3	—	3	—	11	—	2	1	5	—	1,935	70	—	—
Southbury	—	—	2	—	7	—	—	—	4	—	40	2	—	—
Wallingford	32	1	25	—	24	2	3	—	15	2	1,414	47	—	—
Waterbury	35	3	129	—	204	2	73	24	190	14	6,820	805	7	1
Wolcott	—	—	—	—	2	—	—	—	—	—	—	1	—	—
Woodbridge	—	—	3	—	2	—	—	—	—	—	13	5	—	—
Total	180	21	1,053	19	355	10	845	99	570	57	25,928	2,620	71	3

1919 New Haven County	Typhoid Fever		Measles		Scarlet Fever		Whooping Cough		Diphtheria		Influenza		Chicken Pox	
	C. (1)	D.	C. (6)	D.	C. (7)	D.	C. (8)	D.	C. (9)	D.	C. (10)	D.	C. (19-A)	D.
Ansonia	3	—	27	—	27	—	12	2	15	—	61	13	13	—
Beacon Falls	—	—	1	—	2	—	4	—	2	—	9	1	2	—
Bethany	—	—	—	—	—	—	—	—	—	—	—	2	—	—
Branford	1	—	4	—	5	—	—	—	25	1	82	4	3	—
Cheshire	2	—	53	—	4	—	6	—	2	1	10	1	1	—
Derby	5	—	2	2	7	—	7	—	47	—	—	14	—	—
East Haven	10	—	1	—	8	—	—	—	5	—	—	3	1	—
Guilford	1	—	82	—	1	—	—	—	—	—	22	2	27	—
Hamden	2	—	129	2	17	—	9	—	17	1	236	7	23	—
Madison	1	1	2	—	9	—	1	—	—	—	16	1	5	—
Meriden	11	1	7	—	122	2	4	—	75	2	175	59	3	—
Middlebury	—	—	8	—	6	—	—	—	2	—	6	—	6	—
Milford	4	—	166	—	27	—	9	—	12	5	23	9	7	—
Naugatuck	2	1	31	1	24	—	—	—	7	4	25	10	9	—
New Haven	80	9	873	12	213	5	116	3	443	15	322	158	173	—
North Branford	—	1	—	—	1	—	—	—	—	—	—	—	—	—
North Haven	1	—	34	—	2	—	3	—	4	—	64	2	1	—
Orange	8	—	58	—	19	1	—	—	36	1	6	10	6	—
Oxford	—	—	2	—	2	—	2	—	2	—	—	1	—	—
Prospect	—	—	—	—	—	—	—	—	1	—	—	3	—	—
Seymour	—	—	95	2	7	—	6	1	2	—	9	5	—	—
Southbury	—	—	1	—	—	—	—	—	—	—	11	1	—	—
Wallingford	3	1	6	—	57	—	2	—	102	9	—	8	—	—
Waterbury	33	3	346	12	359	7	10	5	427	39	417	103	23	—
Wolcott	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Woodbridge	—	—	—	—	2	—	—	—	—	—	—	—	—	—
Total	167	17	1,928	37	920	16	291	11	1,226	78	494	418	305	—

C.—Cases

D.—Deaths

51

**Tuberculosis
(pulmonary)**

C.—Cases

D.—Deaths

[illegible]

CASES AND DEATHS FROM

1918 <i>Middlesex County</i>	Typhoid Fever		Measles		Scarlet Fever		Whooping Cough		Diphtheria		Influenza		Chicken Pox	
	(1)		(6)		(7)		(8)		(9)		(10)		(10-A)	
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Chester	—	—	—	—	1	—	—	—	1	—	64	—	1	—
Clinton	2	—	9	—	2	—	5	1	—	—	10	5	3	—
Cromwell	—	—	11	—	14	—	15	2	4	—	132	3	8	—
Durham	—	—	31	2	2	—	4	—	—	—	—	1	—	—
East Hampton ..	—	—	6	—	2	—	10	—	—	—	372	3	1	—
East Haddam ..	—	—	—	—	2	—	9	—	3	—	105	3	39	—
Essex	—	—	—	—	—	—	2	—	1	—	122	5	1	—
Haddam	—	—	—	—	2	—	7	—	—	—	60	3	—	—
Killingworth ..	—	—	2	—	—	—	—	—	—	—	8	1	1	—
Middlefield ..	—	—	—	—	2	—	1	—	1	1	—	3	—	—
Middletown	5	1	108	3	24	1	12	3	144	5	531	183	1	—
Old Saybrook ..	1	—	9	—	1	—	—	—	—	—	300	6	1	—
Portland	1	—	—	—	11	—	6	4	9	—	235	14	8	—
Saybrook	1	—	1	—	2	—	1	—	21	2	154	3	7	—
Westbrook	—	—	—	—	—	—	—	—	—	—	18	1	—	—
Total	10	1	177	5	65	1	72	10	184	8	6,111	234	74	—

1919 <i>Middlesex County</i>	Typhoid Fever		Measles		Scarlet Fever		Whooping Cough		Diphtheria		Influenza		Chicken Pox	
	(1)		(6)		(7)		(8)		(9)		(10)		(10-A)	
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Chester	—	—	6	—	1	—	—	—	3	—	8	—	6	—
Clinton	—	—	7	—	3	—	6	—	—	—	—	1	1	—
Cromwell	4	—	36	2	4	—	—	—	4	—	25	2	12	—
Durham	—	—	14	1	—	—	—	—	—	—	—	2	—	—
East Hampton ..	2	—	24	—	26	—	3	—	5	1	78	5	3	—
East Haddam ..	—	—	66	—	1	—	—	—	1	—	—	1	1	—
Essex	—	—	2	—	4	—	—	—	—	—	16	—	1	—
Haddam	3	1	14	—	5	—	—	—	1	—	2	—	1	—
Killingworth ..	—	—	17	—	—	—	—	—	—	—	—	—	2	—
Middlefield ..	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Middletown	13	1	154	2	29	1	1	—	37	5	254	26	33	—
Old Saybrook ..	—	—	2	—	2	—	—	—	5	—	—	—	—	—
Portland	3	—	15	—	17	—	—	—	2	—	—	1	—	—
Saybrook	1	—	90	1	5	—	1	—	2	1	87	2	5	—
Westbrook	—	—	2	—	—	—	—	—	—	—	—	1	—	—
Total	27	2	449	6	97	1	11	—	60	7	470	42	75	—

C.—Cases

D.—Deaths

CASES AND DEATHS FROM

1918		Typhoid Fever		Measles		Scarlet Fever		Whooping Cough		Diphtheria		Influenza		Chicken Pox	
New London County		(1)		(6)		(7)		(8)		(9)		(10)		(19-A)	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Borrah		—	—	43	—	—	—	1	—	2	—	2	6	—	—
Colchester		—	—	1	—	—	—	1	—	1	—	178	4	—	—
East Lyme		—	—	8	—	8	—	4	1	1	1	204	8	—	—
Franklin		—	—	—	—	—	—	—	—	—	—	—	2	—	—
Griswold		1	1	4	—	2	—	17	1	22	1	816	24	6	—
Groton		16	2	59	1	46	1	33	1	20	—	718	41	28	—
Lebanon		1	—	17	—	4	—	4	—	1	—	15	3	—	—
Ledyard		—	—	2	—	3	—	—	—	—	—	27	3	—	—
Lisbon		—	—	2	—	—	—	9	—	2	—	24	2	—	—
Lyme		—	—	5	—	—	—	33	—	—	—	10	—	—	—
Montville		—	—	2	—	—	—	3	—	5	—	5	17	2	—
New London		5	1	47	2	88	—	59	4	102	7	1,777	212	11	—
North Stonington		—	—	11	—	3	—	—	—	5	1	115	3	—	—
Norwich		5	1	12	—	26	1	5	—	47	7	715	209	1	1
Old Lyme		—	—	8	—	—	—	—	—	—	—	142	5	—	—
Preston		6	1	3	—	—	—	—	—	3	—	334	19	—	—
Salem		—	—	—	—	—	—	—	—	1	—	10	—	—	—
Sprague		—	—	—	—	3	—	—	2	5	1	—	13	—	—
Stonington		2	1	237	2	23	1	40	1	45	1	1,092	44	8	—
Voluntown		—	—	—	—	1	—	—	—	1	—	42	5	—	—
Waterford		—	—	4	—	5	1	36	—	4	—	68	11	1	—
Total		36	7	465	5	212	4	244	10	267	19	6,294	631	57	1

1919		Typhoid Fever		Measles		Scarlet Fever		Whooping Cough		Diphtheria		Influenza		Chicken Pox	
New London County		(1)		(6)		(7)		(8)		(9)		(10)		(19-A)	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Borrah		—	—	—	—	2	—	—	—	—	—	—	2	—	—
Colchester		1	—	3	—	—	—	—	—	15	—	14	5	—	—
East Lyme		—	—	—	—	4	—	2	1	—	—	—	—	—	—
Franklin		—	—	6	—	—	—	3	—	—	—	2	4	4	—
Griswold		—	—	12	—	14	—	—	—	21	2	4	1	4	—
Groton		5	—	3	—	14	—	57	1	43	1	234	16	67	1
Lebanon		—	—	12	—	3	—	20	—	5	—	—	1	—	—
Ledyard		—	—	—	—	2	—	—	—	2	—	—	2	—	—
Lisbon		—	—	—	—	—	—	2	—	2	—	—	—	—	—
Lyme		—	—	—	—	1	—	—	—	—	—	—	—	—	—
Montville		—	—	—	—	1	—	—	—	1	—	—	4	—	—
New London		20	3	11	—	45	—	17	—	151	9	179	69	13	—
North Stonington		—	—	—	—	—	—	6	—	1	—	—	3	—	—
Norwich		6	—	16	—	20	1	7	2	58	4	232	40	—	—
Old Lyme		—	—	1	—	2	—	48	—	—	—	45	1	2	—
Preston		4	—	—	—	—	—	—	—	—	—	51	5	—	—
Salem		—	—	1	—	—	—	—	—	—	—	—	—	—	—
Sprague		—	—	—	—	—	—	8	—	—	—	—	1	—	—
Stonington		—	—	—	—	5	—	36	3	65	3	57	11	53	—
Voluntown		—	—	3	—	—	—	1	—	2	—	3	2	4	—
Waterford		4	—	—	—	15	—	1	—	6	1	17	4	1	—
Total		40	3	68	—	128	1	208	7	372	20	838	171	148	1

C.—Cases

D.—Deaths

5

5

55

CASES AND DEATHS FROM

1918 Fairfield County	Typhoid Fever		Measles		Scarlet Fever		Whooping Cough		Diphtheria		Influenza		Chicken Pox	
	C. (1)	D.	C. (6)	D.	C. (7)	D.	C. (8)	D.	C. (9)	D.	C. (10)	D.	C. (10-A)	D.
Bethel	1	—	5	—	—	—	5	—	2	—	54	4	—	—
Bridgeport	21	6	289	13	106	3	272	41	302	35	4,892	700	51	—
Brookfield	—	—	12	—	—	—	—	—	1	—	33	—	—	—
Danbury	3	2	72	5	8	—	10	3	12	2	3,340	105	2	1
Darien	1	—	35	1	6	—	13	—	3	—	306	10	2	—
Easton	3	—	1	—	—	—	—	—	—	—	—	1	—	—
Fairfield	—	—	5	—	2	—	96	1	17	3	15	47	27	—
Greenwich	5	1	476	3	47	1	25	1	38	2	1,867	99	78	—
Monroe	—	—	1	—	—	—	9	—	1	—	23	3	—	—
New Canaan	2	—	167	—	5	—	9	—	5	—	454	10	9	—
New Fairfield	—	—	1	1	—	—	—	—	—	1	13	2	—	—
Newtown	—	—	34	—	4	—	8	—	—	—	14	4	3	—
Norwalk	15	6	23	1	48	6	60	3	17	1	1,862	160	—	1
Redding	—	—	24	—	4	—	6	—	3	—	219	2	6	—
Ridgefield	2	1	21	1	—	—	10	—	3	2	—	15	—	—
Shelton	5	1	8	—	8	—	4	—	12	1	1,804	43	2	—
Sherman	—	—	2	—	—	—	1	1	—	—	4	—	—	—
Stamford	6	2	570	9	26	—	144	7	32	9	2,245	197	82	—
Stratford	7	1	22	—	6	—	16	4	27	3	743	34	13	—
Trumbull	—	—	10	1	2	—	—	—	5	—	84	7	—	—
Weston	—	—	5	—	—	—	—	—	—	—	24	3	—	—
Westport	3	—	7	1	1	—	—	1	—	—	509	27	—	—
Wilton	—	—	58	—	—	—	—	—	1	—	129	2	12	—
Total	74	20	1,848	36	273	10	688	62	571	59	18,764	1,475	287	2

1919 Fairfield County	Typhoid Fever		Measles		Scarlet Fever		Whooping Cough		Diphtheria		Influenza		Chicken Pox	
	C. (1)	D.	C. (6)	D.	C. (7)	D.	C. (8)	D.	C. (9)	D.	C. (10)	D.	C. (10-A)	D.
Bethel	1	—	10	—	2	—	2	—	10	1	—	2	2	—
Bridgeport	18	5	514	15	94	3	7	—	455	42	751	187	53	—
Brookfield	—	—	5	—	36	1	—	—	—	—	43	1	—	—
Danbury	5	5	4	—	14	—	1	—	29	2	191	21	8	—
Darien	—	—	—	—	—	—	—	—	13	2	12	7	7	—
Easton	—	—	12	—	—	—	—	—	—	—	1	—	—	—
Fairfield	—	—	4	—	2	1	3	—	23	5	—	7	2	—
Greenwich	1	1	14	—	81	1	4	—	25	3	252	19	176	—
Monroe	—	—	22	—	1	—	—	—	—	—	—	—	—	—
New Canaan	1	—	14	1	—	—	6	—	1	—	76	3	20	—
New Fairfield	—	—	—	—	—	—	—	—	—	—	4	1	—	—
Newtown	—	—	6	—	—	—	5	—	1	—	1	1	2	—
Norwalk	14	3	4	—	15	1	2	2	14	2	—	31	—	—
Redding	—	—	1	—	4	—	—	—	—	—	2	2	3	—
Ridgefield	—	—	1	—	—	—	—	—	—	—	—	3	—	—
Shelton	7	—	152	5	11	—	17	2	41	2	50	2	6	—
Sherman	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Stamford	12	2	150	3	74	—	20	1	65	14	25	52	55	—
Stratford	1	—	40	1	7	—	5	1	88	6	86	11	3	—
Trumbull	—	—	34	—	—	—	—	—	3	—	5	4	1	—
Weston	1	—	22	—	2	—	—	—	1	—	9	—	—	—
Westport	1	—	89	1	11	—	—	—	12	1	10	3	4	—
Wilton	—	—	—	—	1	—	—	—	—	—	50	—	—	—
Total	63	16	1,098	26	355	7	72	6	781	80	1,567	357	342	—

C.—Cases

D.—Deaths

REPORTABLE DISEASES, 1912-1919

German Measles	Mumps	Tuberculosis (pulmonary)	Tuberculosis (other forms)	Syphilis	Conjunctivitis	Gonorrhea	Cerebro Spinal Meningitis	Pneumonia (lobar)	Septic Sore Throat
(19-B) C. D.	(19-C) C. D.	(28-29) C. D.	(30-35) C. D.	(37) C. D.	(38-A) C. D.	(38-C) C. D.	(61-C) C. D.	(92-1) C. D.	(100) C. D.
6	56	275	37	76	2	239	19	74	6
6	1	10	4	2	—	4	7	29	1
3	1	3	1	—	—	—	4	2	5
47	10	1	2	—	—	2	1	1	10
1	13	44	2	1	1	8	3	133	38
13	—	6	—	—	2	2	—	27	7
1	—	2	—	—	—	—	—	—	2
9	1	26	8	2	—	2	1	17	33
17	11	1	2	—	—	—	—	3	2
29	17	2	1	—	—	2	—	15	4
30	3	53	7	4	—	5	2	1	65
1	3	12	—	1	—	—	—	15	1
1	1	5	—	—	—	—	—	2	—
2	2	1	2	2	—	—	1	37	5
1	—	3	1	—	—	—	—	3	—
227	119	446	62	85	4	264	25	339	525

German Measles	Mumps	Tuberculosis (pulmonary)	Tuberculosis (other forms)	Syphilis	Conjunctivitis	Gonorrhea	Cerebro Spinal Meningitis	Pneumonia (lobar)	Septic Sore Throat
(19-B) C. D.	(19-C) C. D.	(28-29) C. D.	(30-35) C. D.	(37) C. D.	(38-A) C. D.	(38-C) C. D.	(61-C) C. D.	(92-1) C. D.	(100) C. D.
11	1	170	25	6	1	284	4	1	4
—	20	13	345	12	—	8	10	10	118
—	—	10	3	—	—	1	—	2	1
—	—	4	1	1	—	1	—	2	7
3	—	1	3	2	4	1	1	1	2
5	2	37	18	3	6	8	1	46	11
—	—	4	—	—	—	3	—	1	1
—	—	1	—	—	—	1	—	7	1
—	—	34	—	—	—	1	—	—	—
—	—	2	2	12	—	3	2	2	15
1	—	39	1	—	—	2	—	1	1
—	7	13	2	9	—	2	—	7	1
—	—	20	7	8	—	1	1	—	33
6	4	158	17	2	—	9	—	3	17
—	—	16	—	—	—	1	—	4	—
—	—	4	2	9	—	3	—	4	4
—	18	1	—	—	—	—	—	1	—
54	—	396	46	442	21	332	7	93	220
C.—Cases					D.—Deaths				

CASES AND DEATHS FROM

1918		Typhoid Fever		Measles		Scarlet Fever		Whooping Cough		Diphtheria		Influenza		Chicken Pox	
Litchfield County		C. (1)		C. (6)		C. (7)		C. (8)		C. (9)		C. (10)		C. (10-A)	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Barkhamsted ...				9								17			
Bethlehem ...	1			3				1				7			
Bridgewater ...				50		2							1		
Canaan ...								4		1		196	3		
Colebrook ...				1											
Cornwall ...				44									4	4	
Goshen ...				10		1							2		
Harwinton ...				9				3		2		17	6	4	
Kent ...				72	1	1						88	1		
Litchfield ...	3			2		1		1		13		266	15		
Morris ...						3						21			
New Hartford ...	2			43	1	11		11				245	6		
New Milford ...	4			66		3				8		173	15		
Norfolk ...				3				9		2		282	7	1	
North Canaan ...				7		6		3		7		248	16		
Plymouth ...	1			7		4		1	1	7	2	106	33		
Roxbury ...						2		2				9			
Salisbury ...	1			14		5		11	1	9	1	121	9	2	
Sharon ...				69				3				71	7	8	
Thomaston ...	1			1		7		1	1	7		1,310	21		
Torrington ...	2	1		1		12		2		40	3	571	120	4	
Warren ...												9			
Washington ...												118	5		
Watertown ...	9			62		5		2		14	2	896	30	1	
Winchester ...	3	3		12	1	12		3	2	3		1,149	53		
Woodbury ...	2			1		1		17				126	4	2	
Total	29	4	486	3	77	—	74	5	113	8	6,246	359	26	—	—

1919		Typhoid Fever		Measles		Scarlet Fever		Whooping Cough		Diphtheria		Influenza		Chicken Pox	
Litchfield County		C. (1)		C. (6)		C. (7)		C. (8)		C. (9)		C. (10)		C. (10-A)	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Barkhamsted ...	1					1		9	1			72	1	4	
Bethlehem ...										1		1		2	
Bridgewater ...		1													
Canaan ...								5				25			
Colebrook ...															
Cornwall ...												45	1	1	
Goshen ...												1			
Harwinton ...				1		1		1	2	1			2	15	
Kent ...	2									3		134	5	11	
Litchfield ...		1		24	1	7		22	1	1		335	3		
Morris ...	1									4		21			
New Hartford ...				3				6	1			133	2	29	
New Milford ...				4						2			5		
Norfolk ...				6				3		1		121	3		
North Canaan ...				1		1		6		3		67	1		
Plymouth ...	3			21	2	69		1	1	8		1	5		
Roxbury ...						5						6	1	16	
Salisbury ...				2						3		5	2	13	
Sharon ...	1							37				288	9		
Thomaston ...	2			4		17		4	1	3		130	4		
Torrington ...	6	1			1	10		3	4	24	4		22		
Warren ...						3						14			
Washington ...	2			6								53	1		
Watertown ...	4			21		19	1	7		14		661	23	2	
Winchester ...				7		5		80		4	2		12		
Woodbury ...				8		4							3		
Total	22	3	108	4	142	1	184	11	72	6	2,244	109	93	—	—

C.—Cases

D.—Deaths

CASES AND DEATHS FROM

1918 <i>Windham County</i>	Typhoid Fever		Measles		Scarlet Fever		Whooping Cough		Diphtheria		Influenza		Chicken Pox	
	(1)		(6)		(7)		(8)		(9)		(10)		(10-A)	
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Ashford	—	—	—	—	—	—	—	—	—	—	32	5	—	—
Brooklyn	—	—	3	—	9	—	5	1	3	—	259	6	—	—
Canterbury	—	—	—	—	—	—	—	—	—	—	32	2	—	—
Chaplin	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Eastford	—	—	3	—	—	—	—	—	—	—	53	2	—	—
Hampton	—	—	—	—	—	—	1	—	—	—	16	—	—	—
Killingly	2	1	10	—	4	—	18	5	1	—	1,610	31	24	—
Plainfield	3	—	10	—	1	—	1	1	17	3	517	23	3	—
Pomfret	—	—	21	—	—	—	—	—	—	—	273	1	—	—
Putnam	1	—	12	—	3	1	4	1	7	2	929	47	—	—
Scotland	—	—	1	—	—	—	1	—	1	—	29	1	—	—
Sterling	1	—	5	—	1	—	—	—	2	—	52	8	6	—
Thompson	1	—	5	—	1	—	8	1	9	—	376	11	12	—
Windham	3	2	33	1	6	—	12	2	40	2	8,000	137	—	—
Woodstock	—	—	28	—	—	—	8	—	—	—	245	4	2	—
Total	11	3	131	1	25	1	58	11	80	7	12,423	279	47	—

1919 <i>Windham County</i>	Typhoid Fever		Measles		Scarlet Fever		Whooping Cough		Diphtheria		Influenza		Chicken Pox	
	(1)		(6)		(7)		(8)		(9)		(10)		(10-A)	
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Ashford	—	—	6	—	—	—	—	—	—	—	—	1	—	—
Brooklyn	—	—	—	—	6	—	—	—	4	—	7	1	4	—
Canterbury	—	—	—	—	4	—	11	—	1	—	10	1	1	—
Chaplin	—	—	4	—	1	—	1	—	2	—	—	—	—	—
Eastford	2	—	2	—	1	—	—	—	—	—	—	—	3	—
Hampton	—	—	13	—	—	—	1	—	2	—	28	—	2	—
Killingly	3	—	8	—	8	1	7	1	7	1	19	8	—	—
Plainfield	2	1	43	—	4	—	4	—	16	3	200	5	—	—
Pomfret	—	—	—	—	3	—	5	—	1	—	29	—	—	—
Putnam	1	—	1	—	5	—	3	—	6	—	207	8	—	—
Scotland	—	—	6	—	—	—	—	—	—	—	—	1	1	—
Sterling	—	—	2	—	—	—	—	—	2	—	—	1	1	—
Thompson	—	—	1	—	1	1	—	—	8	1	1	1	—	—
Windham	6	2	22	—	36	—	—	—	45	4	—	6	—	—
Woodstock	1	1	16	—	1	—	—	—	—	—	46	6	—	—
Total	15	4	124	—	70	2	32	1	94	9	547	42	12	—

C.—Cases

D.—Deaths

BUREAU OF PREVENTABLE DISEASES

REPORTABLE DISEASES, 1918-1919

German Measles	Mumps	Tuberculosis (pulmonary)	Tuberculosis (other forms)	Syphilis	Conjunctivitis	Gonorrhea	Cerebro Spinal Meningitis
(19-B) C. D.	(19-C) C. D.	(28-29) C. D.	(30-35) C. D.	(37) C. D.	(38-A) C. D.	(38-C) C. D.	(61-C) C. D.
5	1	3	1	1	1	1	1
5	1	4	1	1	1	1	1
6	1	10	2	1	1	4	1
1	1	10	1	1	1	1	1
1	1	10	4	1	1	1	1
1	1	1	1	1	1	1	1
1	1	4	1	1	1	1	1
6	1	15	3	1	1	1	1
32	1	64	—	2	1	6	1
1	4	48	12	3	—	—	—

German Measles	Mumps	Tuberculosis (pulmonary)	Tuberculosis (other forms)	Syphilis	Conjunctivitis	Gonorrhea	Cerebro Spinal Meningitis
(19-B) C. D.	(19-C) C. D.	(28-29) C. D.	(30-35) C. D.	(37) C. D.	(38-A) C. D.	(38-C) C. D.	(61-C) C. D.
1	1	1	1	1	1	1	1
1	1	3	1	1	1	1	1
1	1	13	2	1	1	3	1
1	1	15	3	1	1	3	1
1	1	1	1	1	1	1	1
1	1	12	1	1	1	2	1
6	1	15	14	1	1	2	1
1	1	44	5	19	1	20	1
—	1	81	—	1	—	—	—

C.—Cases

D.—Deaths

CASES AND DEATHS FROM

1918 Hartford County	Typhoid Fever		Measles		Scarlet Fever		Whooping Cough		Diphtheria		Influenza		Chicken Fox	
	(1)		(6)		(7)		(8)		(9)		(10)		(10-A)	
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Avon	—	—	9	1	1	—	2	1	—	—	156	10	—	—
Berlin	—	—	9	—	12	—	2	—	2	2	339	20	—	—
Bloomfield	1	—	10	—	1	—	16	1	1	—	164	6	—	—
Bristol	6	—	5	1	49	—	64	9	20	3	1,778	104	3	—
Burlington	—	—	—	—	—	—	—	—	—	—	68	14	—	—
Canton	1	1	6	—	5	—	4	—	—	—	678	24	—	—
East Granby	—	—	—	—	1	—	—	—	—	—	116	4	2	—
East Hartford	3	—	10	—	20	—	15	3	12	2	374	26	—	—
East Windsor	1	—	29	—	5	—	—	—	1	—	200	7	—	—
Enfield	—	—	88	1	46	3	8	3	9	—	195	54	2	—
Farlington	—	—	2	—	5	—	1	—	4	—	653	14	18	—
Glastonbury	1	—	66	1	12	—	52	2	15	1	313	14	19	—
Granby	—	—	1	—	7	—	—	—	1	—	245	4	—	—
Hartford	42	14	449	9	167	2	382	27	270	16	7,309	854	86	—
Hartland	—	—	—	—	—	—	—	—	—	—	8	2	—	—
Manchester	10	—	84	1	33	—	13	5	22	—	2,466	60	—	—
Marlborough	—	—	2	—	—	—	—	—	—	—	10	—	—	—
New Britain	10	3	295	2	119	3	87	20	126	13	6,440	432	27	—
Newington	—	—	2	—	—	—	1	—	4	1	52	6	—	—
Plainville	—	—	4	—	7	2	3	1	2	—	1,128	16	—	—
Rocky Hill	2	—	2	—	—	—	51	1	—	—	115	4	—	—
Simsbury	—	—	14	—	2	—	2	1	4	1	128	16	3	—
Southington	4	—	14	1	7	—	—	—	24	3	1,186	45	3	—
South Windsor	—	—	2	1	—	—	—	—	1	—	18	10	—	—
Suffield	—	—	58	—	—	—	32	1	1	—	354	11	6	—
West Hartford	2	—	5	—	14	—	74	—	12	—	328	42	21	—
Wethersfield	10	—	7	—	—	—	2	4	7	—	422	10	3	—
Windsor	1	—	20	—	13	—	2	—	7	—	394	25	1	—
Windsor Locks	6	—	9	—	—	—	3	—	—	—	400	14	—	—
Total	100	18	1,202	18	526	10	814	82	545	42	26,037	1,848	194	—

1919 Hartford County	Typhoid Fever		Measles		Scarlet Fever		Whooping Cough		Diphtheria		Influenza		Chicken Fox	
	(1)		(6)		(7)		(8)		(9)		(10)		(10-A)	
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Avon	—	—	4	—	6	—	10	1	1	—	16	2	3	—
Berlin	7	—	12	—	9	1	1	—	2	—	8	4	—	—
Bloomfield	—	—	87	—	—	—	1	—	1	—	9	4	1	—
Bristol	1	—	53	1	56	1	7	1	88	5	134	19	1	—
Burlington	1	—	—	—	3	—	—	—	2	—	3	—	—	—
Canton	1	—	5	—	11	—	—	1	10	1	—	3	—	—
East Granby	—	—	6	—	—	—	—	—	—	—	32	—	—	—
East Hartford	3	—	18	—	25	—	—	—	9	—	1	10	—	—
East Windsor	—	—	7	—	2	—	—	—	3	1	3	4	—	—
Enfield	4	—	2	—	22	—	2	—	15	4	17	14	2	—
Farlington	—	—	14	—	11	—	1	—	5	—	33	2	4	—
Glastonbury	—	—	79	—	19	—	—	—	10	—	101	7	2	—
Granby	—	—	3	—	—	—	—	—	—	—	24	1	1	—
Hartford	32	6	701	16	390	15	104	11	362	23	471	212	229	—
Hartland	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manchester	8	2	24	1	66	—	4	1	14	—	923	23	6	—
Marlborough	—	—	—	—	—	—	—	—	—	—	7	1	—	—
New Britain	9	3	476	5	174	1	48	5	130	14	772	65	80	1
Newington	—	—	5	1	10	—	—	—	6	—	—	2	—	—
Plainville	—	—	6	—	2	—	—	—	2	—	129	1	—	—
Rocky Hill	—	—	19	—	7	—	—	—	7	—	28	3	2	—
Simsbury	—	—	3	—	3	—	—	—	7	—	121	10	1	—
Southington	2	—	15	1	9	—	—	—	32	1	111	7	5	—
South Windsor	—	—	2	—	—	—	—	—	1	—	—	—	—	—
Suffield	1	—	2	—	—	—	—	—	2	—	102	2	4	—
West Hartford	2	—	81	—	21	—	22	1	16	—	96	6	20	—
Wethersfield	—	—	52	—	12	—	—	—	18	—	87	5	2	—
Windsor	2	—	15	—	1	—	—	—	8	—	—	3	5	—
Windsor Locks	4	—	14	2	2	—	—	—	3	1	7	4	—	—
Total	77	17	1,709	27	861	18	205	21	747	50	3,235	414	368	1

C.—Cases

D.—Deaths

REPORTABLE DISEASES, 1918-1919

Measles		Mumps		Tuberculosis (pulmonary)		Tuberculosis (other forms)		Syphilis		Conjunctivitis		Gonorrhea		Cerebro Spinal Meningitis	
C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
61	—	499	308	—	—	—	—	63	537	10	87	—	260	—	12
C.—Cases D.—Deaths															

CASES AND DEATHS FROM

1918 Tolland County	Typhoid Fever		Measles		Scarlet Fever		Whooping Cough		Diphtheria		Influenza		Chicken Pox	
	(1)		(6)		(7)		(8)		(9)		(10)		(19-A)	
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Andover	1	—	—	—	—	—	—	—	—	—	77	2	—	—
Bolton	—	—	2	—	2	—	1	—	1	—	11	1	—	—
Columbia	—	—	—	—	—	—	—	—	1	—	15	1	—	—
Coventry	—	—	42	—	—	—	—	—	1	—	312	4	—	—
Ellington	—	—	2	—	—	—	—	—	—	—	7	12	—	—
Hebron	—	—	—	—	—	—	39	—	—	—	42	—	4	—
Mansfield	—	—	5	—	1	—	—	—	1	—	477	36	—	—
Somers	—	—	7	—	—	—	—	—	2	1	—	6	—	—
Stafford	2	—	—	—	—	—	1	—	—	—	523	12	—	—
Tolland	—	—	5	—	—	—	—	—	—	—	74	8	—	—
Union	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Vernon	—	—	6	—	1	—	—	—	11	—	575	66	—	—
Willington	—	—	6	—	13	—	—	—	1	—	140	8	—	—
Total	3	—	88	—	17	—	41	—	18	1	3,253	156	4	—

1919 Tolland County	Typhoid Fever		Measles		Scarlet Fever		Whooping Cough		Diphtheria		Influenza		Chicken Pox	
	(1)		(6)		(7)		(8)		(9)		(10)		(19-A)	
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Andover	—	1	—	—	—	—	—	—	—	—	7	1	—	—
Bolton	—	—	6	—	—	—	—	—	—	—	—	—	3	—
Columbia	—	—	10	—	—	—	—	—	3	—	10	—	—	—
Coventry	—	—	15	—	—	—	1	—	—	—	—	8	—	—
Ellington	—	—	—	—	13	—	—	—	—	—	—	1	—	—
Hebron	—	—	6	—	—	—	—	—	—	—	—	1	1	—
Mansfield	1	—	88	2	6	—	—	—	1	—	82	9	—	—
Somers	—	—	—	—	—	—	—	—	1	—	—	1	—	—
Stafford	2	—	178	2	8	—	1	—	—	—	144	2	3	—
Tolland	—	—	4	—	—	—	—	—	—	—	1	—	—	—
Union	—	—	3	—	—	—	—	—	—	—	—	—	—	—
Vernon	1	—	—	—	56	—	—	—	27	2	—	5	—	—
Willington	—	—	90	2	7	—	—	—	5	—	25	2	—	—
Total	4	—	400	6	90	—	1	1	36	3	269	30	7	—

C.—Cases

D.—Deaths

INCIDENCE OF REPORTABLE DISEASES BY MONTHS, 1918

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Anthrax	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebro Spinal Meningitis	21	10	12	15	11	10	9	7	5	9	5	3	101
Chicken Pox	29	106	152	92	103	34	47	11	15	40	26	105	701
Conjunctivitis Inf.	—	7	—	—	11	7	—	2	—	1	—	—	38
Diphtheria	322	173	203	208	132	132	159	99	204	248	209	259	2,000
Dysentery, bacillary ..	—	—	—	—	—	—	—	—	4	1	—	—	5
Favus	—	—	—	—	—	—	—	—	—	—	5	—	5
German Measles	65	322	552	332	329	70	21	6	8	5	6	7	1,000
Glanders	—	—	—	—	—	—	—	—	—	—	—	—	—
Influenza	—	—	—	—	—	—	—	—	8,970	82,057	6,244	7,785	105,006
Leprosy	—	1	—	—	—	1	—	—	—	—	—	—	2
Malaria	—	—	—	—	—	—	—	1	3	—	—	—	4
Measles	705	601	773	851	932	550	304	110	86	204	89	245	5,000
Mumps	45	410	350	329	178	89	54	22	17	25	9	24	1,000
Paratyphoid Fever	—	—	—	1	1	—	1	1	7	1	—	1	14
Pellagra	—	—	1	—	—	—	—	—	—	—	—	—	1
Pneumonia (lobar)	7	28	75	57	30	8	17	11	128	1,464	207	224	2,000
Polioomyelitis	1	2	1	—	2	—	1	14	21	7	2	—	48
Rabies	—	—	—	—	—	1	—	—	—	—	—	1	2
Scarlet Fever	178	190	178	175	160	103	59	37	68	118	97	187	1,000
Septic Sore Throat	6	6	1	2	86	1	—	1	1	1	2	6	100
Smallpox	3	2	21	12	12	11	32	1	—	—	—	—	100
Tetanus	—	—	—	—	1	—	1	1	—	—	—	1	5
Trachoma	—	1	1	—	—	—	—	1	1	—	2	4	10
Tuberculosis (all forms) ..	138	148	178	205	225	236	240	208	174	114	155	146	2,000
Typhoid Fever	18	9	11	16	15	24	38	104	147	30	12	19	500
Whooping Cough	286	421	448	338	411	259	269	188	76	72	42	26	2,000
Gonorrhoea	12	20	35	17	40	100	100	104	166	75	77	82	1,000
Syphilis	3	2	3	5	15	59	44	33	73	33	36	73	500

INCIDENCE OF REPORTABLE DISEASES BY MONTHS, 1919

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Anthrax	—	1	—	—	—	—	—	—	—	—	—	—	1
Cerebro Spinal Meningitis ..	3	3	7	5	10	2	—	3	2	1	5	3	50
Chicken Pox	47	71	129	128	219	104	54	17	17	128	191	245	1,000
Conjunctivitis Inf.	—	14	64	4	5	5	—	—	8	4	3	1	100
Diphtheria	280	258	281	171	180	122	89	130	249	548	576	504	3,000
Dysentery, bacillary ..	—	—	—	—	—	4	—	—	1	—	—	—	5
Favus	—	1	2	—	2	—	—	—	2	—	—	4	10
German Measles	11	13	14	12	10	8	3	4	2	3	12	7	100
Glanders	—	—	—	—	—	—	—	—	—	—	—	—	—
Influenza	6,718	2,232	1,242	263	56	3	1	2	32	44	44	27	10,000
Leprosy	—	—	—	1	—	—	—	—	—	—	—	—	1
Malaria	—	—	—	—	—	6	—	—	—	2	—	—	8
Measles	362	671	869	939	878	383	157	58	84	327	473	683	5,000
Mumps	6	15	35	34	40	8	14	12	3	36	67	65	500
Paratyphoid Fever	—	—	—	—	—	—	3	5	2	5	1	2	20
Pellagra	—	1	—	—	—	—	—	—	—	—	—	—	1
Pneumonia (lobar)	258	84	52	27	19	7	6	5	4	9	28	46	500
Polioomyelitis	1	1	—	1	—	1	—	3	1	2	1	1	10
Rabies	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	198	242	239	234	191	127	65	67	129	320	358	493	2,000
Septic Sore Throat	—	1	4	5	5	—	—	—	1	2	4	2	20
Smallpox	—	—	1	—	—	—	—	—	—	—	—	—	1
Tetanus	—	—	—	—	—	1	1	—	—	1	1	—	4
Trachoma	—	—	3	—	—	—	—	—	—	1	1	—	5
Tuberculosis (all forms) ..	183	175	199	175	172	175	164	162	163	214	159	119	2,000
Typhoid Fever	6	6	17	19	29	23	48	73	67	68	43	16	500
Whooping Cough	37	45	31	19	39	58	93	47	65	77	167	226	1,000
Gonorrhoea	66	125	123	120	133	123	133	108	122	79	94	124	1,000
Syphilis	128	88	122	90	209	178	197	150	205	183	203	261	2,000

TYPHOID FEVER—MORBIDITY BY COUNTIES

County	Year	Population	Cases Reported	Morbidity Rate (per 100,000)
Fairfield	1918	338,344	74	21.8
	1919	352,482	63	17.8
Hartford	1918	329,970	100	30.3
	1919	344,695	77	22.3
Litchfield	1918	81,888	29	35.4
	1919	82,989	22	26.5
Middlesex	1918	53,793	10	18.5
	1919	54,921	27	49.1
New Haven	1918	421,643	180	42.6
	1919	438,791	167	38.0
New London	1918	102,485	36	35.1
	1919	106,973	40	37.3
Tolland	1918	28,539	3	10.5
	1919	29,178	4	13.7
Windham	1918	53,868	11	20.4
	1919	54,331	15	27.6

Typhoid Outbreaks

There were 443 cases reported for the year 1918 and 415 for the year 1919, and 74 deaths for 1918 and 56 for 1919.

Typhoid outbreaks which were investigated by this Bureau are summarized as follows:

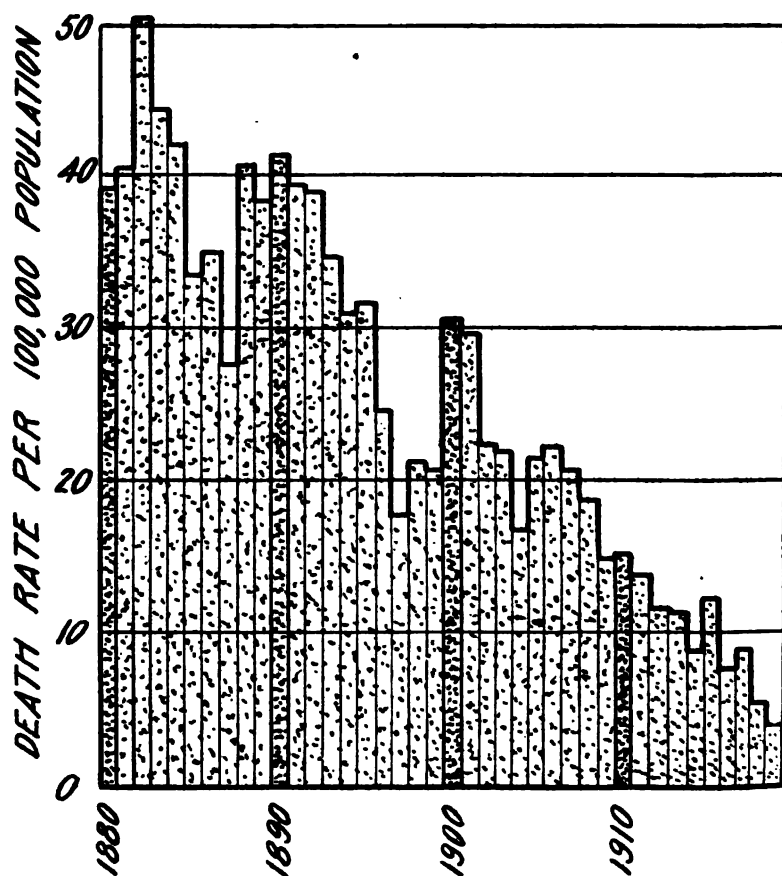
Litchfield—Water-Borne Outbreak

One of the most interesting cases of water-borne typhoid occurred in the village of East Litchfield in July, 1918. The village center is comprised of six small families. Three cases of typhoid fever in different families were reported during the latter part of July. The house in which the first case occurred supplied milk to the other families; also, water supplied to the houses was obtained from the spring located in the rear of the house in which the first case developed. The first patient, an employee, cared for the milk, several quarts of which were sent daily to Waterbury in addition to the homes in the vicinity. Two other cases occurred in other families. Careful investigation as to source of infection of the first case proved of no avail. There was no history of contact of the second and third cases with the first case. The patients were all males, and their ages eleven, twenty-three and sixty-six years. The twenty-three-year old patient was the first case. The sanitary condition of the milk-house and method of caring for the product were found to be beyond reproach and, there being no other cases in the neighborhood or in Waterbury traceable to this milk supply, the milk was eliminated as a source of infection.

The spring water supplying the other houses in which typhoid developed was examined at three or four different times and

TYPHOID IN CONNECTICUT

DEATH RATES BY YEARS. 1880-1919



found to be free from contamination. This water was fed from the spring through a lead pipe to a cistern at the bottom of the hill, approximately 700 feet away. Samples of water from this cistern showed it to contain *b. coli* in 1 c.c. of water. The other houses were piped from this cistern and upon inquiry it was learned that the pipe leading from the spring to the cistern had been laid seventy years. The cistern was emptied and flushed three or four times and further samples of water showed that it still contained *b. coli*. Upon further investigation it was found that the drain leading from the house in which the first patient was taken ill, passed under the lead pipe leading to the spring. The possibility of the old pipe being porous or broken and thus receiving sewage contamination from the house drain caused this pipe to be dug up at the point of its crossing the drain, whereupon it was found that the drain tile was broken for a length of from eighteen to twenty-four inches and that the ground was well saturated with sewage. The lead water pipe was corroded to the extent of having holes from the size of a pin-head to a large bean. This lead pipe, being laid on a steep incline, gave the water sufficient force to draw in the sewage and in this way undoubtedly the *b. coli* entered the cistern at the foot of the hill.

Investigation of these cases occurred as soon as the first case was reported and as a means of protection the milk supply was cut off until the manner of infection had been determined. The families receiving water from the spring were advised to use other water which was obtainable nearby. This precaution undoubtedly saved many other members of the families from infection as it was later clearly proved that the patient had been a walking case for probably two weeks previous to taking to bed and had used the household toilet.

Wallingford—Ice-Cream Outbreak

A group of eighteen cases apparently infected by ice-cream contaminated by an unknown typhoid carrier is well illustrated by an outbreak which occurred in Wallingford during August and September, 1918. The onset of twelve of these cases occurred within one week. All of the cases were in seven families. The water supply was common for almost the entire town; the milk supply varied; and no history of common activities was ascertained which would account for general infection. The weather two weeks previous to the onset of the cases was extremely warm and all of the patients had eaten freely of ice-cream obtained from one or both of two ice-cream stores. This was the only thing found in common among all of the patients after diligent inquiry. One of the stores manufactured the ice-cream on the premises and the other store obtained its cream from

a wholesaler who sends his product all over the state. The proprietor of the store in which the ice-cream was made gave no history of ever having had typhoid fever nor did any of his employees. This was also true of the proprietor and the employees of the store selling the cream bought from the wholesaler. All investigation having narrowed down to the possibility of the common source of infection being the ice-cream, samples of blood were taken from all of the people in each store. All samples proved negative in the store handling the wholesaler's ice-cream and negative of all the employees in the store in which the ice-cream was made except the sample obtained from the proprietor, which gave a positive Widal reaction. Several Widal's were made of this man's blood and all continued to be positive. Specimens of his stools were taken but no evidence of typhoid bacilli were found. His ice-cream was quarantined and, aside from some later contact cases, no further typhoid developed in town.

While the typhoid bacilli were not isolated from this man's stools, there is good reason to believe, from subsequent investigation, that he had not been feeling well two or three months previous to the outbreak of typhoid in town and, as he had a positive Widal Test, he may have had a walking case of typhoid fever and infected the ice-cream which he assisted in making.

Middletown—Food-Borne Outbreak

Another typhoid outbreak caused by a carrier occurred at Wesleyan University in January, 1918. Eight cases of typhoid fever were reported during the first week of the year, following the return of the students from their Christmas vacation. Three or four cases of typhoid fever had occurred among the students during the early part of the fall following the opening of the fall term of the college. Water, milk and food supply was common to the entire city. The date of onset in each case placed the time of infection before the closing of the college for the Christmas vacation.

Investigation having narrowed the possible source of infection to some carrier, a thorough investigation of all students and employees was made. Among the new employees was a colored cook employed by the College Restaurant, a semi-public institution located on the campus grounds, which a few of the students visited regularly and ate occasional meals. Nearby the college grounds is a general store in which is sold ice-cream, cakes and sandwiches. This store is conducted by the same man who conducts the College Restaurant and the sandwiches sold at the store were prepared by the colored cook. Widal's of all the employees and the students were taken and the chef's blood was among the

samples giving a negative reaction. Subsequent investigation brought the suspicion to the College Restaurant and the general store. The cook's blood was again taken and found to be positive to Widal reaction. Stools were taken at the same time as the specimens of blood and were found to contain typhoid bacilli. The theory is that when he put up the sandwiches he had not been careful in his toilet and so had infected the food.

Each of the students who had typhoid gave a distinct history of having been to the store and of having eaten sandwiches, coffee or ice-cream ten to fourteen days previous to the onset of their illness. This chef was kept under observation for some time and then delivered to the New York authorities, from which state he had come to Connecticut. His stools still showed the presence of typhoid bacilli.

This case emphasizes the great need of obtaining a certificate of health from all food handlers, especially in public institutions, before they are allowed to assume their duties.

Stratford—Water-Borne Cases

The danger of an improper sewerage system in a community in which well water is used is well illustrated by sporadic cases of typhoid fever which occurred during the year 1918 in the town of Stratford. Previous to the outbreak of four cases, occurring in one family, and individual cases in other families, occurring during the year, there is history of a heavy rainfall two or three weeks previous to the onset of the disease. Investigation of the surroundings of individual homes showed beyond any reasonable doubt that the contents of the cesspools, already overflowing, had been washed into the wells and, in turn, had been drunk by the patients. At the time of making this report, a sewer has been laid in this section of the town, wells abandoned, and no further cases have been reported attributable to this source of infection.

Andover—Carrier

One case of typhoid was traced in August, 1918, to a summer boarding house in Andover, and it was found that during the sixteen years previous summer boarders at this place had developed typhoid after reaching home, although no suspicion was attached until this present investigation.

A member of the household was suspected as a carrier, but examinations proved negative, and before additional examinations could be made the suspected person was operated upon for gall bladder trouble and died.

Norwich—Institutional Outbreak

From June until December, 1918, an intensive study was made of an outbreak of typhoid in the Norwich State Hospital. In June seven cases appeared in rapid succession, all but one being in the female wards.

While the investigation from the start favored the opinion that the outbreak was the result of localized infection in these wards, every possible source of infection, including food, water, milk, etc., was thoroughly looked into. No source of infection could be found, but all cases were traced to contact with inmates of a semi-violent ward. A bacteriologist was secured from the laboratory to make examinations of the eighty or ninety inmates of this ward, with the result that five typhoid carriers were isolated.

A detailed report of the bacteriological studies will be found in the report of the Bureau of Laboratories.

Plainville Outbreak

The most serious outbreak of 1919 occurred at the Plainville Camp Ground, where fifteen cases originated.

Six cases of typhoid fever in the village of Kensington, town of Berlin, were reported by the health officer of Berlin August 14, 1919. On August 15 the city of Hartford and the town of Haddam each reported two cases, all of which proved to be closely connected with the Kensington cases. Later single cases were reported from New Canaan, Haddam, Waterbury, Berlin, and Middletown, Ohio, making a total of fifteen cases in this epidemic.

An investigation was immediately instituted by the State Department of Health, and it was established that all of the fifteen cases developed during the first week of August. Allowing two weeks for the period of incubation, the third week of July was fixed as the *time of infection*. Inquiry concerning the activities of the patients during that week showed that all of them had spent all or part of that week at the Methodist Campmeeting Grounds at Plainville, Conn. All the patients were there Sunday, July 20, and three of them were there only on that day. These facts fixed the camp grounds as the *place of infection*, and a most thorough investigation was made at that place in an effort to discover the source of infection.

The camp is located in the woods in the northwestern part of the town of Plainville. It is laid out on the usual plan for such places and consists of a central auditorium surrounded by approximately a hundred cottages. The southeastern part of the grounds slopes downward toward a swamp, on the edge of which the two outside toilets of the camp are located. These

toilets are of a dangerous and filthy type, being constructed without pits or screens and depending for sanitary protection on the frequent removal of their contents. The houses as a rule were poorly screened.

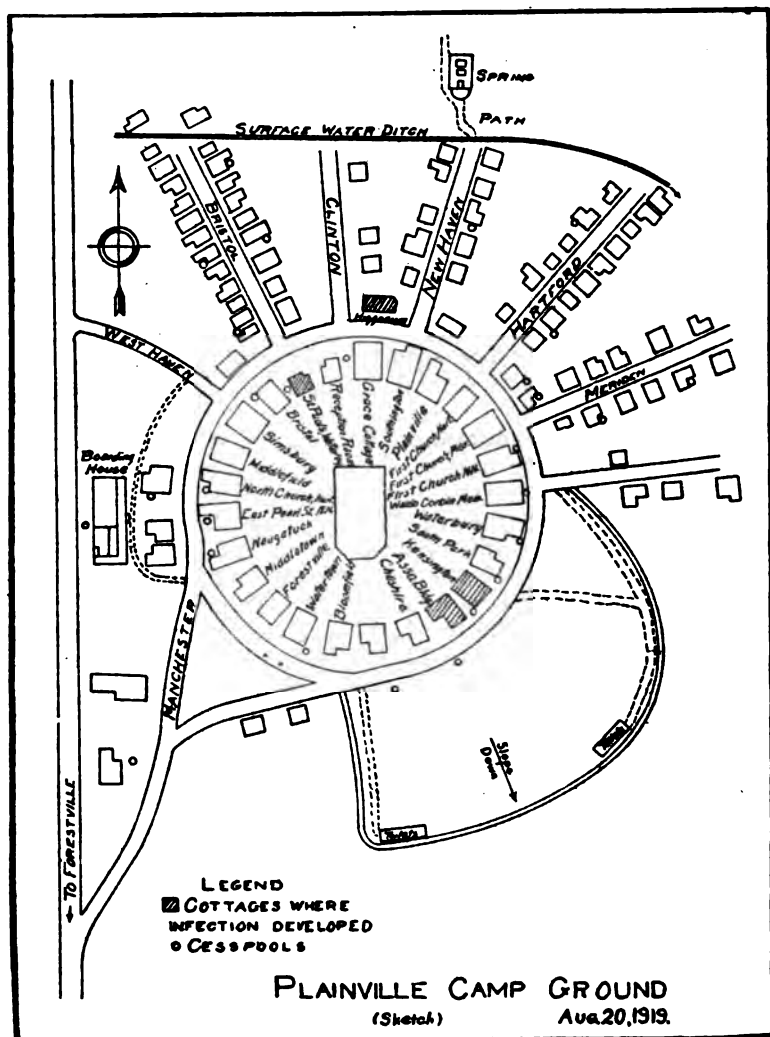
The camp is used by various religious sects during the summer season, the population varying from a few hundred on week-days to about 2,000 on Sundays. During the week of July 20 it was occupied by Methodists, and it was among them that all the cases developed. At the time of the inspection, several weeks later, an Adventist meeting was in progress and none of these visitors were infected.

The water supply for the camp is obtained from the Bristol reservoir, which is also the source of supply for Bristol, Forestville and Plainville. It is piped into many of the cottages and to faucets located at various points of the road which encircles the camp. Water is also obtained from a large spring on the north side of the grounds. The spring is situated on a hill sloping toward the camp and is several hundred feet from the nearest cottages.

There is but one restaurant or boarding house on the grounds. This is located on the western edge of the camp and is large enough to accommodate 150 at a sitting. With but few exceptions all campers and transient visitors obtain their food at this place, either eating it on the premises or taking it, already cooked, to the cottages. No food peddlers are permitted on the grounds. The boarding house is under the management of one of the association members, who has had charge of it a year or more. The food is handled by colored help who have been in the employ of the boarding house since the camp was opened several years ago. The two or three waitresses are from families who have cottages at the camp. On Sundays and at other times when there are many visitors additional help is brought in.

The milk supply during the week in question came from three nearby farms and amounted to approximately forty quarts a day. The entire supply was sent to the boarding house, none of it being delivered to individual cottages. The food, milk and water supplies were common to all campers.

The attention of the investigators was first directed to the water supply. Examination of the Bristol water proved negative. The spring water was found to be contaminated by *b. coli*. This water was colder than the Bristol supply and was quite generally used by at least two-thirds of the camp population. Between the date of the outbreak and the time of inspection, probably two thousand people drank freely of this water and no further cases developed. This fact eliminated the spring as a likely source of infection, notwithstanding the contamination. As a precaution, however, the spring was ordered closed.



In investigating the milk supply the surprising discovery was made that the farmer who furnished most of the milk was the same man who attended to the cleaning of the toilets and the collection of the garbage. Upon being questioned this man admitted that during rainy weather the milk was frequently delivered in the same wagon which he used to haul away the garbage and privy contents. Inquiry and references to the weather reports showed that rainy weather prevailed during the week in question. Drippings along the camp road which the wagon traversed after collections from the toilets indicated the careless manner in which this work was carried on.

An examination was made of every person employed at the restaurant and also of the producers and handlers of the milk and ice-cream used on the grounds. Tests by the Widal method and for typhoid bacilli in the excreta all proved negative, although one or two persons gave a history of typhoid. Examinations were extended to some of the associates in the affected houses, but these, too, proved negative.

The outbreak was limited to three cottages, seven cases in the Kensington House and two each in the Higganum House and the Association building. At the Kensington House the patients ranged in age from fourteen to nineteen years, three being males and four females. The Association building patients were both females, aged twenty-eight and fifty respectively. The Higganum patients, a man and his wife, were sixty-nine and fifty-nine years of age. All the patients ate food prepared at the boarding house. Those at the Kensington and Higganum cottages brought their food to the cottages to eat, while the Association patients took their meals at the boarding house. At the time of infection the Association building was occupied by about twenty people, the Kensington House by fourteen and the Higganum House by three or four.

The history of the various cases showed that there had been no picnics or "hikes" where the infection might have been contracted outside the grounds. The theory of contaminated milk supply was weakened by the assertion of four of the patients that they did not consume milk in any form while at the camp. Three of the patients said they had not used any of the spring water.

By process of elimination the source of infection was reduced to three possibilities:

1. A walking case of typhoid. There is a good history of one of the patients having felt ill for several days before the onset of the other cases, although she took to bed about the same time. *Within a week* after taking to bed, this patient developed intestinal hemorrhage, a condition which lends weight to the theory of a walking case. There is a definite history of contact

at the time of infection between this patient and all but two of the others.

2. Direct contact with infected fecal matter. Toilet drippings along the road were undoubtedly picked up by the shoes and rubbers of many campers. Fingers which came in contact with such shoes or rubbers may have carried the infection to the mouth. A more probable contact is suggested by the fact that milk-cans were carried in the same wagon used to convey the privy contents. A small particle of infected matter which had clung to a milk-can may have been transferred to food by one of the employees at the restaurant. As the food supply was common in all cases, this theory of the source of infection is quite tenable.

3. A typhoid carrier. Although examinations of excreta for typhoid bacilli and of the blood by the Widal method were made upon many of the contacts, it is probable that some of the contacts were not reached because many of the persons who occupied the camp at the time of infection had left for their homes in various parts of the state before the investigation was begun. In every large gathering of people there is almost certain to be one or more typhoid carriers. There is also the possibility that one of the patients was a "precocious carrier," i. e., a person who passes the bacilli before any of the outward symptoms of the disease develop.

The possibility of fly-borne infection is considered remote because the houses in which the cases were grouped were no more exposed to fly infection than a majority of the houses in the camp.

New London—Groton

During the months of August, September and November there occurred in New London and Groton a total of 16 cases. These cases were scattered, although located mostly along the waterfront. Several of them were Italian, some Portuguese, and a few scattered nationalities.

No common source of water, milk or food supply was ascertained except for three secondary cases. Considerable time was spent in tracing these cases and several investigators were put on the work without success. The nearest to any solution of the source of infection of the cases was the fact that two of the cases lived on a houseboat which was possibly visited by some of the other cases, although denied.

East Haven—Source Undetermined

Seven cases occurred in one Italian family, the original case being ill two weeks before the disease was recognized. No source of infection of the original case could be located, although

it was ascertained that two Italian children had been ill on the same street some time previous, but could not be located at the time of the investigation.

Eastford—Suspected Carrier

Early in December an outbreak of typhoid fever was reported in a lumber camp near the village of Phoenixville. Upon investigation it was found that the discovery of typhoid in the camp had caused the workers to leave, some for parts unknown, making it difficult to secure complete information. It was later ascertained that one of these men who had gone to Vermont and another to North Windham, Conn., died of the disease.

These, with two positive cases located at the camp, made a total of four cases for this outbreak.

The source of infection was not definitely determined, although a typhoid history was secured from the wife of the boarding-house keeper. She had typhoid in August, 1914, in Mt. Carmel and moved to Phoenixville in February, 1915, and in March her brother and sister contracted the disease.

She took charge of the boarding-house at the lumber camp on November 11, 1919, and on December 14 her son and a lumberman were taken ill, the disease diagnosed as typhoid, and later verified by Widal Tests. All the remaining persons at the camp were immediately immunized and an investigation of the water, milk and food supplies made. Arrangements were made for a local physician to secure specimens of dejecta to ascertain the possibility of the boarding-house keeper being a carrier. This was done because of the remoteness of the camp and the severity of the weather.

Owing to the delegation of this work, the final results of the investigation were unsatisfactory. Water and milk analyses were negative.

Norwalk—Source Undetermined

In September, 1919, six cases occurred in Norwalk, but the usual investigation for source of infection failed to reveal the origin, although two cases were apparently infected by bathing in the harbor near a sewer outlet. One case was secondary.

Windsor Locks—Source Undetermined

An investigation of four cases in December, 1919, failed to reveal the source of infection, although a carrier was suspected. No definite results were secured from the examinations.

Middletown—Source Undetermined

A small outbreak occurred in Middletown with five cases in the months of October and November, 1919. Four of the cases took milk from one dairy farm, but it was impossible to find any cause of infection of the milk at this farm.

Portland—Scattered Cases

In September, October and November, 1919, four cases of typhoid fever were investigated in this town. Of the two cases in September, one was of a young woman who had eaten raw clams which she dug herself on a beach west of New Haven which was at the time posted as infected. The investigation of milk, water and other foods was negative, which with other negative history makes the infection by clams seem positive, particularly as the period of incubation conformed with the dates of eating the clams and the appearance of symptoms.

Of the three other cases, located in different parts of the town, no source of infection could be found and one of these cases was later determined not to be one of typhoid fever.

Other Investigations

Investigations of one- to three-case outbreaks were made in Middletown, Bristol, East Windsor, East Hartford, Canton, Thomaston, Wallingford, and Litchfield.

Three of these cases were determined to be secondary to cases in the same family, but the source of infection was not determined in any of the primary cases.

Tuberculosis

Tuberculosis has been gradually declining for a number of years, although during the war the death rate was considerably higher. In 1919 a decided decrease is noted, the death rate being 101.4 as against 126.0 for 1918.

Little can be done for the direct control of tuberculosis cases, although a great deal can be accomplished by educational measures and improvement of sanitary and housing conditions.

The tuberculosis sanatoria remove from the community advanced cases which are a menace to others and thereby participate in reducing the infections by this disease. By proper treatment a certain percentage of the cases are cured which would otherwise die, thereby reducing the death rate.

Considerable credit should be given to the visiting nurses of the state, through whose influence many incipient cases are now being treated.

MORBIDITY AND MORTALITY FOR PULMONARY TUBERCULOSIS IN CONNECTICUT BY COUNTIES FOR YEARS 1918 AND 1919

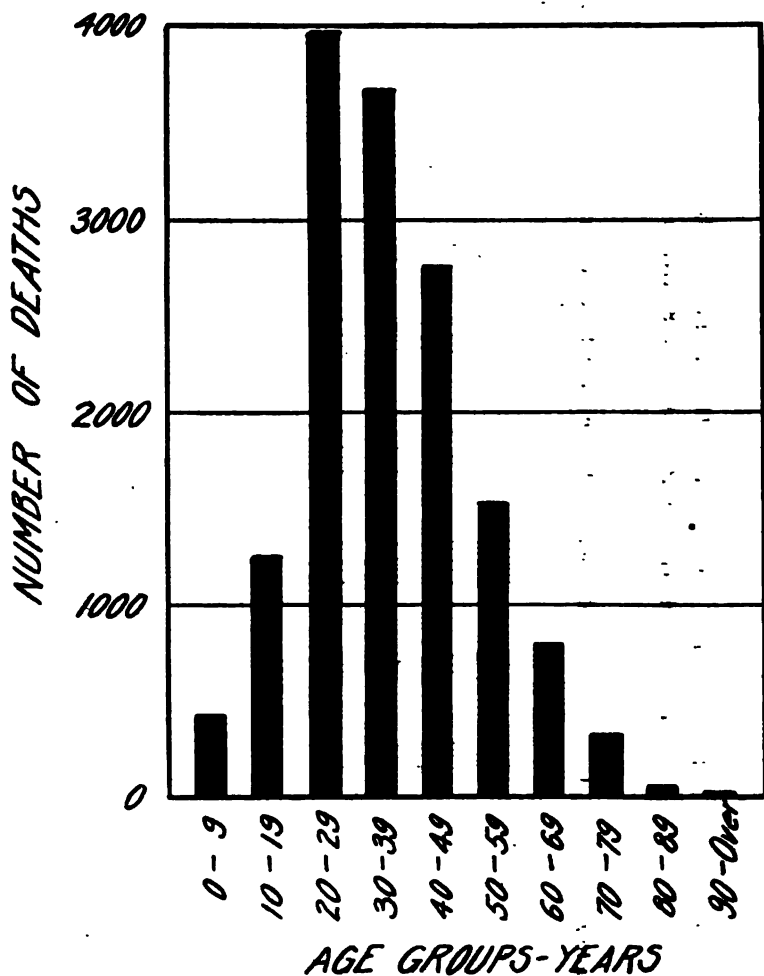
County	1918					1919				
	Cases	Deaths	Morbidity Rate (per 100,000)	Death Rate (per 100,000)	Fat. Rate per cent.	Cases	Deaths	Morbidity Rate (per 100,000)	Death Rate (per 100,000)	Fat. Rate per cent.
New Haven County*	704	537	166.9	127.3	76.4	591	452	134.6	103.0	76.4
New Haven	366	195	226.6	120.7	53.2	355	107	211.1	63.6	30.1
Waterbury	146	94	143.6	92.4	64.3	101	84	94.2	78.3	83.1
Fairfield County*	409	407	120.8	120.2	99.5	340	373	96.4	105.8	109.7
Bridgeport	254	190	166.3	124.4	74.8	160	132	101.7	83.9	82.5
Stamford	52	33	127.6	81.0	63.4	53	20	122.0	46.0	37.7
Stamford County*	437	409	132.4	123.9	93.5	392	308	113.7	89.3	58.5
Hartford	220	147	170.0	113.6	66.8	199	95	148.3	70.8	47.7
New Britain	107	57	183.0	97.5	53.2	86	45	140.8	73.7	52.3
New London County	141	197	137.5	192.2	139.7	172	181	160.7	169.2	105.2
Litchfield County	39	70	56.5	85.4	179.4	46	46	55.4	55.4	100.0
Middlesex County	42	85	78.0	158.0	202.3	28	69	50.9	125.6	246.4
Tolland County	9	23	31.5	80.5	255.5	16	12	54.8	41.1	75.0
Windham County	40	48	74.2	89.1	120.0	55	44	101.2	80.9	80.0
Total for State	1,821	1,776	129.0	125.8	97.5	1,640	1,485	101.9	101.4	90.5

*County totals include cities appearing with counties.

Rates are based on populations estimated from the school census.

DEATHS FROM PULMONARY TUBERCULOSIS IN CONNECTICUT

BY AGE GROUPS - 1909-1918



Much of the credit for the lessened number of cases of tuberculosis in children can be attributed to the excellent work being done by the Commissioner on Domestic Animals in eradicating tuberculosis from dairy herds.

The State Department of Health, by films, lectures, exhibits, and the promotion of public health nursing, has contributed to the reduction of tuberculosis.

Regardless of the activities of these agencies, a larger and more systematic campaign for the reduction of this highly destructive disease should be inaugurated. Tuberculosis clinics and public health nurses should be available for all sections of the state.

TUBERCULOSIS—PULMONARY

Morbidity, Mortality and Fatality Rates

Year	Population	Cases	Deaths	Morbidity Rate (per 100,000)	Mortality Rate	Fatality Rate (per cent. reported cases)
1915	1,241,314	2,015	1,497	162.3	120.6	74.3
1916	1,291,989	2,016	1,551	156.0	120.0	76.9
1917	1,354,930	1,795	1,752	132.5	129.3	97.6
1918	1,409,530	1,821	1,776	129.2	126.0	97.5
1919	1,464,360	1,640	1,485	112.0	101.4	90.5

TUBERCULOSIS—ALL FORMS.

Deaths and Mortality Rates

Year	Deaths	Rate	U. S.	Mass.	N. Y.	R. I.
1915	1,727	139.1	145.8	140.2	163.9	157.0
1916	1,795	138.9	141.6	147.4	155.1	166.7
1917	2,079	153.4	146.4	144.1	159.9	162.5
1918	2,064	146.4	149.1	156.7	160.7	169.4
1919	1,707	116.6	125.7	122.7	133.7	138.7

Diphtheria

Diphtheria has appeared in undue prevalence during the past year, particularly in the larger towns, but the disease has been of a mild type and the fatality rate of 7.5 in 1919 is the lowest ever known in Connecticut. The large increase in the number of cases, however, has increased the mortality rate from 15.7 per 100,000 in 1915 to 17.3 in 1919.

The disease is proving extremely difficult to control owing to the large number of diphtheria carriers found attending the schools by the health officers and school physicians when they culture the nose and throat of pupils.

Various methods to free these carriers from the germs have been tried, but only exceptionally has success met these efforts. In other searches which were made in several of the towns for

carriers, the value of controlling diphtheria by means of detection and isolation of carriers was emphasized. On the other hand, the ease of determining by the Schick Test the susceptibility of persons to diphtheria and the almost complete protection offered by the use of toxin-antitoxin makes this latter test and treatment a more promising means of stamping out the disease.

Diphtheria Outbreak—Industrial School for Girls

This school had approximately 250 inmates, and from December 29, 1917, to March, 1918, 36 clinical cases of diphtheria occurred and 92 carriers were found. Strict isolation of cases and carriers was instituted with antitoxin immunization of contacts, and in the treatment of carriers tonsillectomy and adenoidectomy were performed, where necessary.

Regardless of these measures, clinical cases of diphtheria appeared in the institution at intervals during the greater part of the year 1918. It was then decided to Schick Test all inmates and attendants, and all non-immune persons were immunized with toxin-antitoxin. Within a month after this immunization the institution was free from the disease and no cases have since appeared. This institution is now using the Schick Test on all admissions, followed by toxin-antitoxin if not immune.

Other Outbreaks of Diphtheria Investigated

Other outbreaks of diphtheria investigated by this Bureau occurred in New Haven, Stonington, Branford, and Stratford during the years 1918 and 1919.

The Bureau was consulted during this period quite frequently by health officers as to methods of procedure in handling outbreaks of diphtheria and in culturing schools, without requiring a visit to the seat of the trouble.

Early in 1919, it was made known to the health officers that the Department would supply Schick Test outfits for use in schools and institutions when desired. Toxin-antitoxin is supplied in the same way, and special effort is being made to have all public institutions adopt this test and safeguard inmates as a routine procedure on admission to the institution.

DIPHTHERIA

Morbidity and Fatality Rates

Year	Population	Cases	Deaths	Morbidity Rate (per 100,000)	Fatality Rate (per cent. reported cases)
1915	1,241,314	2,161	195	174.1	9.0
1916	1,291,989	1,870	187	144.7	10.0
1917	1,354,930	2,367	234	174.7	9.9
1918	1,409,530	2,348	201	166.6	8.6
1919	1,464,360	3,388	253	231.4	7.5

Deaths and Mortality Rates

Year	Deaths	Rate	U. S.	Mass.	N. Y.	R. I.
1915	195	15.7	15.7	20.0	17.4	16.4
1916	187	14.5	14.5	16.8	14.9	23.1
1917	234	17.3	16.5	22.1	16.8	24.6
1918	201	14.3	13.8	15.7	16.7	16.0
1919	253	17.3	14.7	14.7	19.0	19.4

DIPHTHERIA—MORBIDITY BY COUNTIES

County	Year	Population	Cases Reported	Morbidity Rate (per 100,000)
Fairfield	1918	338,344	571	168.7
	1919	352,482	781	221.5
Hartford	1918	329,970	545	165.0
	1919	344,695	747	216.7
Litchfield	1918	81,888	113	137.9
	1919	82,989	72	86.7
Middlesex	1918	53,793	184	342.0
	1919	54,921	60	109.2
New Haven	1918	421,643	570	135.1
	1919	438,791	1,226	279.4
New London	1918	102,485	267	260.5
	1919	106,973	372	347.7
Tolland	1918	28,539	18	63.0
	1919	29,178	36	123.3
Windham	1918	53,868	80	148.5
	1919	54,331	94	173.0

Measles

There has been a steady decrease in the number of cases of measles reported in the state since 1916, when the morbidity rate for the year was 807.0. In 1917 the rate was 550.7 and a further decrease to 386.7 in 1918 was followed by 401.8, a slight increase in 1919. This decrease in the case rate since 1916 is in accord with the usual cycle of the disease, and we should look toward the return of the disease in epidemic form during the year 1920 and plan precautionary measures.

There have been a few isolated epidemics of the disease in some of the congested areas. Numerous calls were received for advice from local health officials in the control of measles outbreaks, but only one required individual investigation,—an outbreak in Milford in September with school complications.

MEASLES

Morbidity and Fatality Rates

Year	Population	Cases	Deaths	Morbidity Rate (per 100,000)	Fatality Rate (per cent. reported cases)
1915	1,241,314	3,481	54	280.4	1.6
1916	1,291,989	10,426	143	807.0	1.4
1917	1,354,930	7,462	126	550.7	1.7
1918	1,409,530	5,450	87	386.7	1.6
1919	1,464,360	5,884	99	401.8	1.7

Deaths and Mortality Rates

Year	Deaths	Rate	U. S.	Mass.	N. Y.	R. I.
1915	54	4.4	5.4	7.4	8.8	10.0
1916	143	11.1	11.1	12.7	9.9	23.4
1917	126	9.3	14.3	10.0	9.0	11.8
1918	87	6.2	10.8	13.6	12.9	19.6
1919	99	6.8	3.9	4.7	3.4	2.5

MEASLES—MORBIDITY BY COUNTIES

County	Year	Population	Cases Reported	Morbidity Rate (per 100,000)
Fairfield	1918	338,344	1,848	546.1
	1919	352,482	1,098	311.5
Hartford	1918	329,970	1,202	364.2
	1919	344,695	1,709	495.8
Litchfield	1918	81,888	486	593.4
	1919	82,989	108	130.1
Middlesex	1918	53,793	177	329.0
	1919	54,921	449	817.5
New Haven	1918	421,643	1,053	249.7
	1919	438,791	1,928	439.3
New London	1918	102,485	465	453.7
	1919	106,973	68	63.5
Tolland	1918	28,539	88	308.3
	1919	29,178	400	1,370.8
Windham	1918	53,868	131	243.1
	1919	54,331	124	228.2

Scarlet Fever

Scarlet fever has shown a slight increase in the last two years over 1916 and 1917 and is giving health officers considerable trouble because of the mild form exhibited. The well-marked case of scarlet fever is easily recognized and is usually promptly quarantined, while the mild case often passes unobserved until the child returns to school or has infected neighboring children.

With the greater prevalence of this disease, it is comforting to note that the fatality rate shows a marked decrease.

Many calls for assistance have been received because of scarlet fever outbreaks. Among those requiring special attention were the following:

Norwalk—Fairfield County Home

An outbreak of scarlet fever occurred in April, 1918, in the Fairfield County Home, located at Norwalk. Of the eighty children in this home, twenty-four developed scarlet fever, two of the cases resulting fatally. The primary source of the infection was never clearly settled, but suspicion rested strongly on one of the children who had been admitted to the home four days previous to the onset of the first case.

Newington—Home for Crippled Children

An outbreak in this institution in September, 1919, resulted

in nine cases. The methods of control and isolation were directed by this Bureau.

Greenwich—Milk-Borne Epidemic

In December, 1919, twenty cases occurred in Greenwich and East Portchester.

Mansfield—Storrs College

One case in this institution in December, 1919, with several exposures was reported to this Department and immediately investigated. By strict isolation of all concerned, it was possible to prevent the occurrence of other cases.

Other outbreaks were investigated in Glastonbury, Plymouth, Vernon, Rockville, Windsor, and New London.

SCARLET FEVER

Morbidity and Fatality Rates

Year	Population	Cases	Deaths	Morbidity Rate (per 100,000)	Fatality Rate (per cent. reported cases)
1915	1,241,314	1,641	33	131.2	2.0
1916	1,291,989	1,181	30	91.4	2.5
1917	1,354,930	1,528	21	112.8	1.4
1918	1,409,530	1,550	36	109.9	2.3
1919	1,464,360	2,663	46	181.9	1.7

Deaths and Mortality Rates

Year	Deaths	Rate	U. S.	Mass.	N. Y.	R. I.
1915	33	2.7	3.6	5.5	4.3	4.5
1916	30	2.3	3.3	3.5	2.0	5.0
1917	21	1.5	4.2	3.1	2.7	4.6
1918	36	2.6	3.0	2.0	3.0	3.9
1919	46	3.1	2.8	3.1	2.5	2.1

SCARLET FEVER—MORBIDITY BY COUNTIES

County	Year	Population	Cases Reported	Morbidity Rate (per 100,000)
Fairfield	1918	338,344	273	80.6
	1919	352,482	355	100.7
Hartford	1918	329,970	526	159.4
	1919	344,695	861	249.7
Litchfield	1918	81,888	77	94.0
	1919	82,989	142	171.1
Middlesex	1918	53,793	65	120.8
	1919	54,921	97	176.6
New Haven	1918	421,643	355	84.1
	1919	438,791	920	209.6
New London	1918	102,485	212	206.8
	1919	106,973	128	119.6
Tolland	1918	28,539	17	59.5
	1919	29,178	90	308.4
Windham	1918	53,868	25	46.4
	1919	54,331	70	128.8

Whooping Cough

The death rate for whooping cough is the highest for several years, and it is believed that the influenza epidemic of 1918-1919 played a large part in the excessive mortality for this disease in these years.

The highest morbidity rate reported in the two years is in Hartford County, being 246.6 per 100,000 in 1918, and the lowest is in Tolland County, being 3.4 per 100,000 population in 1919.

In some of the rural districts, the disease became so prevalent in the spring of 1918 that it was necessary to close the schools for lack of pupils.

It is evident from the high morbidity and mortality rates of this disease that strenuous efforts should be made for its better control and for the education of the public as to the seriousness of the disease.

WHOOPIING COUGH

Morbidity and Fatality Rates

Year	Population	Cases	Deaths	Morbidity Rate (per 100,000)	Fatality Rate (per cent. reported cases)
1915	1,241,314	1,164	149	93.8	12.8
1916	1,291,989	1,886	161	146.0	8.5
1917	1,354,930	1,911	113	141.0	5.9
1918	1,409,530	2,836	279	201.2	9.8
1919	1,464,360	904	58	61.7	6.3

Deaths and Mortality Rates

Year	Deaths	Rate	U. S.	Mass.	N. Y.	R. I.
1915	149	12.0	8.1	12.8	7.7	18.7
1916	161	12.5	10.2	10.7	7.8	7.7
1917	113	8.3	10.4	6.3	8.6	7.8
1918	279	19.8	16.8	18.0	11.8	24.6
1919	58	4.0	5.5	8.1	2.8	15.2

WHOOPIING COUGH—MORBIDITY BY COUNTIES

County	Year	Population	Cases Reported	Morbidity Rate (per 100,000)
Fairfield	1918	338,344	688	203.3
	1919	352,482	72	20.4
Hartford	1918	329,970	814	246.6
	1919	344,695	205	59.4
Litchfield	1918	81,888	74	90.3
	1919	82,989	184	221.7
Middlesex	1918	53,793	72	133.8
	1919	54,921	11	20.0
New Haven	1918	421,643	845	200.4
	1919	438,791	191	43.5
New London	1918	102,485	244	238.0
	1919	106,973	208	194.4
Tolland	1918	28,539	41	144.6
	1919	29,178	1	3.4
Windham	1918	53,868	58	107.6
	1919	54,331	32	58.8

Smallpox

There were 94 cases of smallpox reported in 1918 and 6 cases in 1919 with no deaths. There has been but one death from this disease in the state for the last five years, although in 1917 there were 423 cases. The disease as a rule has been of a mild type, and every outbreak has been promptly investigated by this Bureau.

In addition a large number of calls have been responded to for the purpose of making a diagnosis where smallpox was suspected.

In 1918 the disease was recognized in the following places: Winsted, Bloomfield, Hartford, Cheshire, Waterbury, East Lyme, Griswold, Voluntown, South Windsor, and Wallingford and in 1919, in Waterbury and Avon.

Most of the original cases were in colored people who had recently come into the state from the South. Three of the outbreaks were on tobacco plantations.

Every effort has been made to encourage general vaccination and particular stress has been laid in the communities where outbreaks have occurred. It is evident from the large increase in the demand for vaccine virus as supplied by the Department that vaccination is being more generally adopted.

SMALLPOX

Year	Population	Cases	Deaths	Morbidity Rate (per 100,000)	Mortality Rate (per 100,000)	Fatality Rate (per cent. re- ported cases)
1915	1,241,314	22	..	1.8	..	..
1916	1,271,989	52	..	4.0	..	..
1917	1,354,930	423	1	31.2	0.1	0.2
1918	1,409,530	94	..	6.7	..	..
1919	1,464,360	6	..	0.4	..	..

Poliomyelitis

Poliomyelitis is a disease that occasionally assumes epidemic form, as it did in 1916 when there were 951 cases in Connecticut, 29 per cent. of which were fatal. The following year, 1917, either the disease was of a more virulent nature or the cases were not completely reported, for 55 per cent. of those ill with poliomyelitis died. In 1918 the reporting of the disease apparently was what might be termed "normal," that is, 31 per cent. were fatal, which was practically the same fatality rate as in the epidemic year, 1916, during which it may be presumed reporting was practically complete, for physicians would be watching for the disease and the milder and abortive cases would be diagnosed and reported.

It speaks well, therefore, for the reporting system of the state to have 16 deaths recorded out of 51 cases for 1918. In the following year, 1919, of 12 cases reported 10 died, giving a fatality rate of 83.3 per cent., which suggests that the reporting was again incomplete, for such a high fatality rate is rare.

Several diseases are in a similar position to poliomyelitis, that is, a disease with but few cases annually and which at times assumes epidemic proportions. Cerebrospinal meningitis, for instance, was epidemic in 1904, and influenza, which was last pandemic in 1889-91, appeared again throughout the world in 1918.

It is hoped that in the future all cases of the rarer diseases will be reported promptly by physicians and householders to assist health officers in instituting preventive measures to safeguard the public welfare.

POLIOMYELITIS

Year	Population	Cases	Deaths	Morbidity Rate (per 100,000)	Mortality Rate	Fatality Rate (per cent. reported cases)
1915	1,241,314	35	10	2.8	0.8	28.6
1916	1,291,989	951	277	73.6	21.4	29.1
1917	1,354,930	29	16	2.1	1.2	55.2
1918	1,409,530	51	16	3.6	1.1	31.4
1919	1,464,360	12	10	0.8	0.7	83.3

Epidemic Lethargic Encephalitis

This disease was apparently first recognized in recent years in Austria in 1916 and had spread through Europe and the British Isles by 1918 and to the United States in the winter of 1918-19.

It was at first considered by certain investigators to be a form of botulism or food poisoning because of the similarity of symptoms.

The first cases in Connecticut were reported in 1919, one case in October, two cases in November and one case in December, a total of four cases for the year.

Unfortunately the term "sleeping sickness" has been applied to this disease because of the lethargy or coma which is a striking symptom in about 75 per cent. of the cases. There is already a disease, "sleeping sickness," which prevails in Africa and is spread by the tsetse fly. For this reason the same term should not be applied to lethargic encephalitis, which is an infection by an unknown micro-organism rather than a disease transmitted by an insect.

Leprosy

Three cases of leprosy were reported in 1918 and one in 1919.

Ansonia

A Greek restaurant worker, a resident of Ansonia, was recognized as being a leper while occupied in New Haven. He had been in this country for six years and history revealed that he was suffering with the disease at the time of his entrance into this country. He was isolated in New Haven.

Bridgeport

This patient was also a Greek, and had been in this country since 1913, but it could not be determined that he showed symptoms of the disease on his arrival although symptoms developed shortly after. This patient was isolated in Bridgeport.

New Haven

An Italian laborer who had been in this country since 1914 was unquestionably suffering with the disease when admitted to this country, and is isolated in New Haven.

Hartford

A native of Trinidad, with no particular occupation, had been in this country for two years. He was deported within three months after his disease was recognized.

It is unfortunate that no provision has been made as yet by this state or the U. S. Government for the care of these cases. They are at present isolated in unsuitable quarters, considering the fact that their isolation is practically permanent.

Gastro-Enteritis

An outbreak of gastro-enteritis occurred in Windsor in February, 1918. The disease was of a severe type and upon investigation it was found that owing to a breakdown in the water supply system the Connecticut River water was turned into the mains without treatment. One case of typhoid fever occurred at this time among the water users.

There were no fatalities, but much unnecessary illness and expense was incurred because of the failure to properly treat the raw river water.

Other Diseases

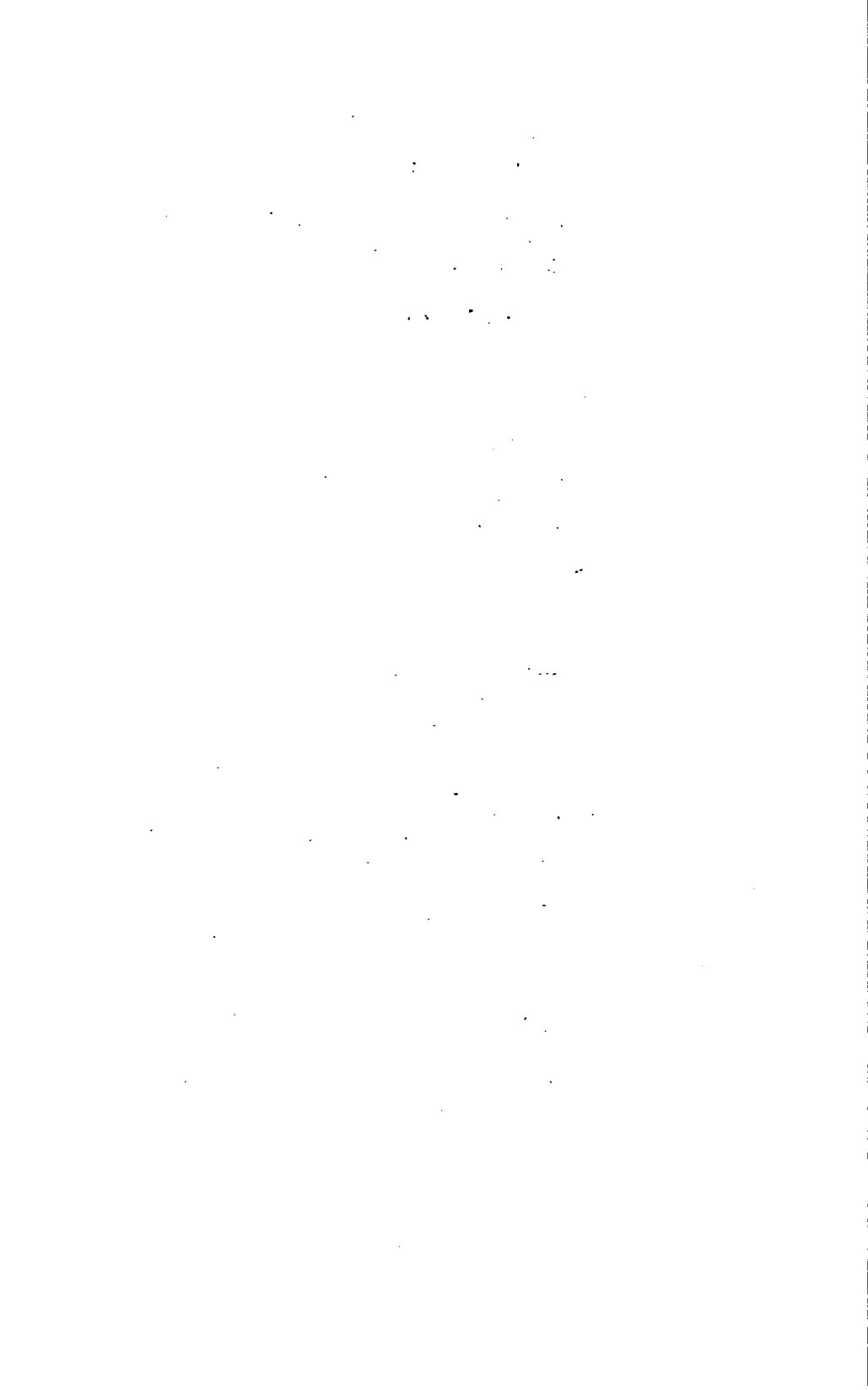
This Bureau was called upon to advise on a number of other diseases which occurred in small outbreaks, such as infectious skin diseases in schools, etc.

Considerable time was devoted in coöperation with the Commissioner on Domestic Animals in efforts to control glanders, anthrax, and rabies, which were prevalent among domestic animals. One case of human anthrax was traced to the use of a shaving brush and the sale of this particular brand of brush was stopped.

This report has been compiled from the files of 1918 and 1919, with the aid of a summary submitted by the Director of the Bureau acting during the period included in this report.

(Signed) STANLEY H. OSBORN,

Director.



REPORT OF THE BUREAU OF LABORATORIES

REPORT OF THE BUREAU OF LABORATORIES

To John T. Black, M.D., Commissioner of Health, Hartford, Connecticut:

I have the honor to submit the following report of the Bureau of Laboratories.

The period covered by this report is twenty-one months, from October 1, 1918, to June 30, 1920. It is to be divided into two parts, the first of nine months, from October 1, 1918, to June 30, 1919, and the second of twelve months, from July 1, 1919, to June 30, 1920. In comparing the statistics as given in the various tables it is to be recalled that the 1918-19 figures represent a nine-month period only.

Laboratory Conditions

The laboratory conditions are similar to those described in the report of the previous two-year period. The laboratory is in the same building on the grounds of the Agricultural Experiment Station at New Haven and the space available is entirely inadequate for the work to be done. The conditions in the basement are necessarily such that anyone interested in proper hygienic surroundings dislikes to have work carried on there. It is, moreover, becoming a serious problem whether the rapid increase in the amount of work which the laboratory is called upon to do can be met for another year in the present quarters.

The erection of a new laboratory building, for which an appropriation was obtained at the last session of the General Assembly, has been postponed, as the sum appropriated was found to be entirely too small to meet the expense of a suitable building. The most pressing need from the standpoint of the laboratory is a sufficiently commodious building for carrying on the routine work, with adequate facilities for expanding this and for the study of special problems.

Laboratory Funds

The appropriation for the laboratory for the first part of the period covered by this report was at the rate of \$13,000 a year; for the last twelve months, \$20,000. This appropriation has proven quite inadequate. The advance in cost of all kinds of laboratory supplies and equipment, and the necessary increases in salary could only have been met by exceeding this amount. Thus during the year 1919-1920 the excess of expenditures over the appropriation was approximately \$1,000 a quarter and the estimated expenses for the year 1920-21 total \$6,000 over the

appropriation. At one time it became a very acute problem whether the work of the laboratory would not have to be materially reduced because of lack of funds. However, when the situation was fully explained to the State Board of Control by a member of the Public Health Council and by the Director of the Laboratory the importance of continuing the work without in any way diminishing it was fully recognized and assurance was given that the necessary funds would be available. A decided increase should be asked for in the budget presented to the next General Assembly. The importance of the work done in the laboratory is such that the diagnoses made there can only be entrusted to skilled persons and these must be retained, even at considerable increases in salary, rather than run any chance of sending out incorrect diagnoses. Moreover, as shown by the statistical tables, the routine work of the laboratory is expanding so rapidly that this must be given careful consideration in asking for future appropriations.

Laboratory Staff

The laboratory force on June 30, 1920, consisted, in addition to the director, of nine full-time, and two part-time workers, as follows: Mr. P. E. Bransfield, B.A., in general charge of the chemical and diagnostic departments; Miss M. Louise Butler, B.A., serologist; Miss E. Louise Smeallie, B.S., assistant chemist; Miss Marion B. Sherwood, B.A., assistant bacteriologist; Miss M. E. MacEwan, assistant bacteriologist; Miss Pauline E. Tucker, stenographer; Miss Edith Wahlers, clerical assistant; Miss N. T. Connell, and Mr. John FitzGerald, full-time laboratory employees; and Miss Theresa Casey and Irving Goldbaum, part-time employees. There is at present one vacancy on the staff, which will be filled in the near future.

Mr. F. Lee Mickle, M.S., who was connected with the laboratory in charge of the diagnostic department from December, 1917, until June, 1920, has recently resigned to accept the position of director of the municipal laboratory at Atlantic City, New Jersey. His ability and devotion to work, as shown in this laboratory, are such that we anticipate for him a large measure of success in his new position.

Amount of Laboratory Work

The volume of work which the laboratory is called upon to do varies so greatly from month to month that the problem of maintaining an adequate working force is at times a difficult one. Thus, during the month of September, 1919, the total number of specimens examined in the diagnostic department was 1523. The following month the total number was 3,550, more than one

hundred per cent increase over the previous month, and during the month of May, 1920, it reached 5,631, which was practically twice the number of April of that year. While the laboratory staff is most loyal and works repeatedly late into the evening without additional compensation, this can only partly solve the problem. For a certain part of the work which can be done by unskilled persons it has been found possible to employ college students by the hour, as may be necessary. It will, however, be more desirable when available space and additional funds will allow, to have a permanent staff sufficiently large to meet all ordinary demands made upon the laboratory and to employ them, during such time as can be taken from routine work, in the study of special problems as they arise. At the present time it is practically out of the question to attempt such special work.

In the last Biennial Report attention was called to the increase in the number of specimens which had been examined at the laboratory during the first year after it was removed to New Haven as compared with the last year that it was located at Middletown. It was there shown that most of this increase was to be explained by the large number of specimens examined in connection with a small typhoid epidemic at one of the State institutions and by the increase in the number of diphtheria cultures, due chiefly to the great number of specimens received from another of the State institutions, where there had been a prolonged epidemic of diphtheria. It was felt that the apparent increase did not indicate that the laboratory was being used by any larger number of physicians than previously for diagnostic purposes. The opinion was there expressed that this lack of a more general use of the laboratory was to be explained by the unstable conditions then existing, due to the war, and that a much larger demand would soon be made upon the laboratory. This increased demand has already become evident. Table I shows the total number of specimens examined at the laboratory for the past ten years.

This table shows many points of interest. It indicates the different periods at which the newer diagnostic methods have been taken up as a part of the routine laboratory work. Of particular interest at this time is the recent increase in the total number of specimens examined. A comparison of the number examined in 1919-20 with those in 1917-18 shows an increase from 21,703 to 34,457; that is, an increase of nearly sixty per cent in the total work of the laboratory. As there has been no increase in the number of specimens examined in the chemical department during this period there has been a correspondingly greater increase in the number examined in the diagnostic department. This lack of increase in the work of the chemical department will be discussed later in the report. In the diagnostic department from

Table I.—Number of Specimens Examined Annually for the Past Ten Years

	1910-1911	1911-1912	1912-1913	1913-1914	1914-1915	1915-1916	1916-1917	1917-1918	*1918-1919	1919-1920
Tuberculosis	1,649	1,619	1,503	1,515	1,386	1,550	1,522	1,512	1,108	2,056
Diphtheria	2,774	3,185	6,582	3,716	6,045	6,834	3,742	10,004	5,862	16,318
Typhoid	783	833	975	716	879	889	663	1,650	298	601
Rabies	19	39	14	24	73	28	141	115	51	24
Malaria	103	108	97	93	100	123	74	42	19	54
Glanders	6	317	455	285	160	265	82	196	38	85
Syphilis .....	....	....	....	962	2,479	3,288	5,389	4,481	4,775	10,349
Gonorrhoea .....	....	....	....	....	12	45	91	412	397	765
Pneumonia .....	....	1	....	....	....	....	1	....	14	41
Feces .....	....	....	....	....	....	....	6	32	205	42
Diphtheria virulence .....	....	....	....	....	....	....	....	12	96	114
Paratyphoid A .....	....	....	....	....	....	....	....	160	298	601
Paratyphoid B .....	....	....	....	....	....	....	....	160	298	601
Water and Sewage	574	472	572	666	599	553	532	1,107	572	973
River Water .....	....	....	....	768	96	73	....	....	....	....
Milk	3,576	4,142	4,193	3,764	3,156	3,294	2,694	1,778	1,339	1,795
Special	58	68	80	105	81	88	46	42	13	38
Total	9,542	10,783	14,471	12,154	15,066	17,030	14,983	21,703	15,383	34,457

* Nine month period.

October 1, 1917, to September 30, 1918, the total number of specimens was 18,852. From July 1, 1919, to June 30, 1920, 31,685, or an increase during that period of sixty-eight per cent. A study of the table shows that while the increase has been quite general it has been most pronounced in the number of diphtheria specimens and Wassermann specimens. The latter have increased from 4,481 during the earlier period to 10,349 during the latter period, an increase of considerably over one hundred per cent. The specimens examined for gonorrhoea likewise show a large relative increase, though the total number is comparatively small.

It is most satisfactory to see this evidence of the increased demands made upon the laboratory. There is every reason to suppose that this increase will continue and future plans for the development of the laboratory should anticipate this.

Conserving Laboratory Outfits

In view of the high prices which must now be paid for all kinds of laboratory supplies the importance of conserving laboratory outfits is evident. The laboratory keeps an exact record of all outfits sent to each individual or institution. The card included in the outfit has printed on it the name of the person or hospital to which it is sent, and when the outfit is returned due credit is given for it. In this way it is possible to tell at any time the number of outfits which have been sent to any party and the number which have been returned. This would seem to prevent any considerable loss of outfits. Table II shows the number of outfits of various kinds sent out from and received by the laboratory from January 1, 1919, to January 1, 1920.

Table II—Outfits Sent Out and Returned to the Laboratory from January 1, 1919, to January 1, 1920

	Typhoid	Diphtheria	Tuberculosis	Syphilis	Gonorrhoea	Pneumonia	Malaria	Fees for Typhoid
Sent out	1,053	5,327	2,318	9,853	998	142	248	208
Returned ...	524	4,328	1,724	8,318	586	19	52	104

It is evident from this table that a great many more are sent out than are received. This would appear to indicate that the individual or institution receiving them had a stock of these on hand for future use. Too often, however, this does not prove to be the case. Repeatedly requests are received for outfits when the laboratory records show that those making the requests should have an abundant supply on hand, but when questioned regarding them the reply usually is that they have none whatever or

Table III—Summary of Work Done in the Diagnostic Department by Months

	Typhoid		Paratyphoid A		Paratyphoid B	Diphtheria	Diphtheria Carriers	Diphtheria Virulence	Tuberculosis	Syphilis	Gonorrhoea	Glanders	Pneumonia	Malaria	Rabies	Feces for Typhoid	Special	Total	
1918-1919	60	298	60	298	60	431	802	7	81	264	25	1	..	2	4	33	1	1,831	
October	26	26	26	26	26	260	409	7	118	370	31	13	..	1	2	38	1	1,328	
November	23	23	23	23	23	204	360	15	111	368	36	11	4	5	5	1	1	1,280	
December	30	30	30	30	30	548	103	1	123	507	35	4	4	..	5	..	..	1,420	
January	11	11	11	11	11	636	166	11	135	514	58	5	4	1	8	4	..	1,575	
February	42	42	42	42	42	460	302	24	133	617	58	..	..	..	7	10	2	1,820	
March	24	24	24	24	24	350	81	22	119	623	33	2	..	3	8	67	..	1,380	
April	38	38	38	38	38	310	27	3	149	886	70	2	2	5	4	52	1	1,623	
May	44	44	44	44	44	216	8	6	139	626	51	2	..	2	2	..	2	1,192	
June	298	298	298	298	298	3,595	2,357	96	1,108	4,775	397	38	14	19	51	205	8	13,467	
*Total	54	54	54	54	54	151	..	11	150	766	55	..	1	7	1	1	1	1,306	
1919-1920	75	75	75	75	75	233	..	..	111	696	48	..	..	8	3	..	..	1,324	
July	71	71	71	71	71	360	11	4	137	719	63	..	..	..	5	1	2	1,523	
August	73	73	73	73	73	974	1,193	26	179	875	83	1	1	3	..	1	1	2,932	
September	37	37	37	37	37	1,501	223	12	181	823	61	1	4	4	5	3	3	3,191	
October	33	33	33	33	33	1,143	640	4	243	986	66	2	2	2	2	1	1	3,333	
November	30	30	30	30	30	1,186	797	10	205	894	63	67	17	4	1	3	2	3,433	
December	16	16	16	16	16	754	46	11	130	643	51	2	4	..	1	9	..	1,699	
January	30	30	30	30	30	760	237	19	102	1,049	65	3	4	5	2	1	..	2,427	
February	37	37	37	37	37	804	738	9	162	953	54	4	5	3	2	..	10	2,855	
March	93	93	93	93	93	1,047	2,998	9	192	963	81	3	..	8	..	13	8	5,601	
April	52	52	52	52	52	408	120	5	174	982	75	2	3	2	2	9	6	1,944	
May	601	601	601	601	601	9,315	7,003	114	2,056	10,349	765	85	41	54	24	42	34	31,685	
June	601	601	601	601	601	9,315	7,003	114	2,056	10,349	765	85	41	54	24	42	34	31,685	
Total	601	601	601	601	601	9,315	7,003	114	2,056	10,349	765	85	41	54	24	42	34	31,685	

* Nine month period.

fewer than our records show. In other words, the outfits have either been lost or used for other purposes. In the case of large institutions this can be periodically adjusted by making a sufficient charge against such institutions for the outfits that have disappeared. In supplying individual physicians the problem is more difficult and each one receiving outfits is requested, for the sake of economy and efficiency, to care for all that are received.

Routine Work of Diagnostic Department

The report of the routine work of the laboratory may be divided into that of the diagnostic department and that of the chemical department. Table III shows a summary by months of the work in the diagnostic department from October 1, 1918, to June 30, 1920.

The variation in the amount of work which the laboratory is called upon to do has already been referred to and is particularly well shown in the above table. This variation occurs more particularly in connection with the number of cultures which are received to be examined for diphtheria. During the school months there is a very marked increase in these and this increase at times is greatly exaggerated by the large number of specimens received in the study of outbreaks of diphtheria. On the other hand, the number of Wassermann specimens shows no such marked variation. While there is, naturally, some decrease during the summer months, this is much less pronounced than one might expect it would be.

The effect upon the laboratory work of the epidemic of influenza during the winter of 1918-19 is shown by the decreased number of specimens received during that period for routine examination.

The laboratory is frequently called upon to make an examination of specimens which are outside its province. In such cases it is the routine to refer the person sending such specimens to some private laboratory.

Typhoid and Paratyphoid

Table IV—Specimens Examined for Typhoid and Paratyphoid

	+	-	?	Total
Typhoid, 1918-19*	94	156	48	298
1919-20	107	426	68	601
Total	201	582	116	899
Paratyphoid A, 1918-19	..	294	4	298
1919-20	..	597	4	601
Total	..	891	8	899

* Nine month period.

Table IV (concluded)—Specimens Examined for Typhoid and Paratyphoid

	+	—	?	Total
Paratyphoid B, 1918-19.....	6	285	7	298
1919-20.....	30	536	35	601
Total	36	821	42	899

As shown by this table all specimens of blood now received for the Widal test are also tested by the agglutination method for paratyphoid A and paratyphoid B. It happens not infrequently that the disease may prove to be paratyphoid instead of typhoid fever.

The comparatively small number of positive Widal tests is indicative of the marked decrease in typhoid fever which has occurred in this State during the past few years.

There is evidently considerable doubt on the part of physicians as to the meaning of a partial positive result in a Widal test. When the test shows some clumping, but not complete clumping and loss of motility, it is reported as partial. This is not considered to be sufficient to give a diagnosis of typhoid fever. In all such cases a second specimen, taken a few days later, should be sent and if the disease is typhoid fever the test should have become positive. Partial positive tests may result from infection from other organisms than the typhoid bacillus.

This laboratory is prepared to examine specimens of feces and urine for typhoid bacilli. During the past year 42 of these have been thus examined, as compared with 205 for the nine months immediately preceding this. In all cases of suspected carriers of typhoid bacilli the stools and urine should be examined and not only once but, in case of the stools, repeatedly, if the first test is negative. Moreover, before a patient convalescent from this disease is discharged the feces and urine should both be tested to show that typhoid bacilli are no longer being excreted and if they are being excreted examinations should be made at intervals until they disappear or it is found that the patient has become a carrier. The importance of typhoid carriers in the spread of this disease and the ease with which the danger from these can be prevented by simple individual cleanliness and proper hygienic precautions is now so well recognized as to be unnecessary to emphasize it further here.

Since the study by this laboratory two years ago of a small outbreak of typhoid fever at one of the State institutions at which several typhoid carriers were found we have attempted to find the most satisfactory method of preparing feces for examination for typhoid bacilli under the conditions which obtain in this State; that is, under conditions where specimens have to be sent comparatively short distances and may be received the same day that they are sent or may be delayed for some time in transit. With-

out giving the details of this study, it can be stated that it has been found by having specimens sent repeatedly from the carriers in this institution that the best results were obtained, when the specimens were received the same day they were sent, without using any preservative whatever; whereas, when there was some delay in receiving them the best results came from using a suspension of feces in thirty per cent glycerine in physiological salt solution.

Diphtheria

Table V—Specimens Examined for Diphtheria

*1918-19	+	—	?	Total
Diphtheria, diagnosis.....	451	1,060	5	1,516
" release.....	692	1,295	2	1,989
Carriers, diagnosis.....	42	1,391	21	1,454
" release.....	99	764	40	903
Total	1,284	4,510	68	5,862
1919-20	+	—	?	Total
Diphtheria, diagnosis.....	1,095	3,712	4	4,811
" release.....	1,443	3,061	..	4,504
Carriers, diagnosis.....	379	4,854	..	5,233
" release.....	316	1,454	..	1,770
Total	3,233	13,081	4	16,318

Table V shows the number of specimens examined for diphtheria during each portion of the period under consideration. During this period there has been no material change made in the outfits that are sent to physicians. Each outfit contains swabs and serum for taking cultures from both the nose and throat and after the cultures are made by the physician the swabs as well as the serum vials are to be returned to the laboratory. Here a second planting is made from each swab. This gives two cultures from the nose and two from the throat, thus practically doubling the amount of work done in each case. It so often happens that the culture made at the laboratory may be positive while that made by the physician is negative, or vice versa, that it has not seemed justifiable to omit either of these cultures. Moreover, the value of nose cultures is so well established that physicians are urged in every case to take these as well as cultures from the throat.

In this table the number of cultures which have been examined for carriers has been separated from those which have been sent in for ordinary diagnostic purposes. As seen from the table, the number received in the search for carriers is not far below the number received for diagnosis. This is simply added evidence of the extent to which cultural methods are being employed in attempts to prevent diphtheria by means of finding carriers.

* Nine month period.

In comparing the number of diphtheria specimens examined during the two portions of the period covered by this report it is evident that many more were examined during the second portion than can be accounted for by the longer period included in it. Thus during the nine-month period of 1918-19, 3,505 specimens were examined for diagnosis and 2,357 for suspected carriers; whereas during the twelve-month period 1919-20, 9,315 were examined for diagnosis and 7,003 for carriers.

During the past year the laboratory has been called upon for a large amount of work in connection with the search for carriers at the State Reformatory at Cheshire and also in a similar search carried out by the health officer of Shelton.

Diphtheria Virulence

Table VI—Specimens Examined for Diphtheria Virulence

	+	—	?	Total
*1918-19	27	69	..	96
1919-20	33	79	2	114
Total	60	148	2	210

It is well recognized that it is impossible in the case of diphtheria carriers to differentiate between virulent and nonvirulent diphtheria bacilli by ordinary cultural and microscopic methods. In order to determine this it is necessary to do the so-called virulence test. This consists in finding whether the suspected organism produces characteristic lesions in a guinea pig into which it has been injected, while these lesions are lacking in another guinea pig which has been immunized by the injection of diphtheria antitoxin. During the past year we have made 114 of these tests at the laboratory, 33 of which were positive and 79 negative and 2 doubtful.

While this test involves considerable work for each case it is so important that it should be much more widely employed than at the present. It is, of course, essential that every child showing the presence of bacilli which are morphologically diphtheria bacilli should be considered a true carrier until proven otherwise and thus kept from infecting others, but it is only common justice to determine as soon as may be whether, in fact, the organisms present are virulent or not. A large per cent of these will be shown to be nonvirulent, in which case the person is not a menace to others and need not be kept from school or from otherwise associating with other children. The long period during which children are unnecessarily kept from school as diphtheria carriers without having this test performed is a criticism upon our lack

* Nine month period.

of sufficient laboratory facilities or of making sufficient use of these.

In connection with diphtheria the Schick test should be mentioned. This test, as should now be well known to every physician, is a simple one, harmless, and demonstrates whether a person is or is not susceptible to diphtheria. If a child is susceptible it can readily be immunized, and apparently permanently immunized, against diphtheria by the toxin-antitoxin injection. Everyone in charge of institutions where young persons are congregated in considerable numbers should eagerly avail himself of this means of permanently eradicating diphtheria from such institutions.

Tuberculosis

Table VII—Specimens Examined for Tuberculosis

	+	—	?	Total
*1918-19	248	860	..	1,108
1919-20	454	1,602	..	2,056
Total	702	2,462	..	3,164

The concentration method as previously described in a report from this laboratory by Prof. Conn, is still the one employed in the examination of sputum. It is believed that in routine work this gives a sufficiently larger number of positives as compared with the examination of smears made direct from the sputum, to more than justify the additional time required for each examination.

For some time smears stained by different methods have been examined from each specimen of sputum, one of which is stained by the so-called Gabett Method and the other after staining with carbol fuchsin, is decolorized by acid alcohol and then given the contrast stain. As a result it has been shown that the tubercle bacillus is found somewhat more readily in the smears stained by the Gabett Method than by the other method. In practically every case, however, a further search of the second specimen has confirmed the diagnosis made from the smears stained by the Gabett Method.

It seems incumbent upon the laboratory in each report, to emphasize the fact that a single negative laboratory result should not be accepted as conclusive. In any case of suspected tuberculosis repeated specimens of sputum should be sent for examination before a negative result is accepted. Some of the best diagnosticians of pulmonary diseases insist upon at least five sputum examinations, provided the results are negative. A positive finding is to be accepted as definite.

* Nine month period.

Wassermann Test for Syphilis

Table VIII—Specimens Examined for Syphilis

	+	—	?	Total
*1918-19	1,023	3,487	265	4,775
1919-20	2,116	7,426	807	10,349
Total	3,139	10,913	1,072	15,124

The marked increase in the number of specimens received for the Wassermann test during the past twelve months is indicated by the above table as well as by Table No. I. Such an increase was to be anticipated, particularly in view of the recent increased emphasis which has been given to the prevention of venereal diseases. As physicians come to appreciate the great value of this test in many obscure cases, in which often no history of the disease can be obtained, they will employ this laboratory method for diagnosis much more frequently than heretofore. A positive Wassermann test will, not infrequently, clear up the diagnosis in such an obscure case.

Again the significance of negative results must be referred to. Except in the secondary stage of the disease, a negative result cannot be accepted as conclusive evidence that the disease is not syphilis. In all stages a strong positive is accepted as definite evidence of the presence of the disease. Whenever a negative result does not tally with the history or the symptoms, further specimens should be sent for diagnosis, and even in the case of repeated negative results these should not be accepted as conclusive when not in accord with history or symptoms.

The question why the laboratory does the Wassermann test only twice each week and why Wednesday and Friday are the days which have been chosen, has been asked sufficiently often to make some explanation advisable. The Wassermann test is one which requires a considerable amount of preliminary preparation and also considerable time to carry it through after it is once started. Fresh sheep corpuscles have to be obtained and these, when used without preservative, as we prefer to use them, can be kept only five or six days. After they are obtained they must be repeatedly washed in saline solution. Also before each series of tests fresh guinea pig serum must be obtained and this, as well as the antigen and amboceptor, must be titrated, using for this the sheep corpuscles which have been prepared as above. Also serum from each of the specimens to be tested must be separated from the clot and inactivated by heating for one half hour. All of these steps must be taken before the test can be begun. The time required is such that the test cannot be started on Monday unless the laboratory force is kept at work on Sunday.

* Nine month period.

Moreover, the carrying out of the test by the method which we employ, requires that it should be started the day before it is completed. At this laboratory each test is made using two different antigens, the plain alcoholic extract and the cholesterinized alcoholic extract. In our experience the icebox method of fixation with the plain alcoholic extract, leaving the specimens in the icebox over night, is not unduly delicate and is most satisfactory. The set of tests with this antigen are accordingly prepared on the day before the test is to be finished and is completed the next morning. The second set, using cholesterinized antigen, is done on the same day on which the first set is completed, and the results are reported out that night. Thus the first Wassermann tests of the week are started on Tuesday and completed and reported by Wednesday night. The tests for the latter part of the week must be begun on Thursday and completed by Friday night, unless the laboratory force is to be kept for Saturday afternoon, which, unless necessity compels it, is, in general, inadvisable. Moreover, not infrequently there are a few specimens in each set on which it is desirable to repeat the test. The present system allows this added test to be made so that the reports can be sent out at latest by Saturday morning instead of holding these over, as would be otherwise necessary, until the following week. It will be more satisfactory, when the laboratory force and equipment is sufficient, to make the test four or five times each week. But under the present conditions, with from 200 to 250 or more specimens for the Wassermann test each week, the present arrangement seems the most feasible one for carrying on the work.

In connection with this subject, it seems desirable to urge upon municipal laboratories and general hospitals to take up the Wassermann test. There appears to be no adequate reason why cities and institutions equipped with laboratories should not include this test among those which they are competent to make. It is confidently believed that this test would be utilized to a greater extent if the physician could take his specimen to a local laboratory. Moreover, this would give an opportunity, in cases where it seems desirable, to have duplicate specimens examined by more than one laboratory. This is very desirable from the laboratory standpoint as in this way each laboratory has a check upon its work by comparing the results with those obtained at other laboratories.

The breaking in transit of bottles containing blood for the Wassermann test has at times been unnecessarily great. At one period it was found that nearly all of the breakage occurred in specimens sent from one of the largest cities of the State. In taking this matter up with the postmaster of that city it was found that a new apparatus for handling parcels had been

installed by which packages were dropped from a considerable height. Later, when the Wassermann specimens were handled by a different method, the breakage from this particular office became practically as low as that from the State in general. It is to be expected that there will always be a small amount of breakage. Any suggestions by which this can be lessened will be gladly welcomed by the Director of the Laboratory.

Gonorrhoea

Table IX—Specimens Examined for Gonorrhoea

	+	—	?	Total
*1918-19	46	350	1	397
1919-20	160	605	..	765
Total	206	955	1	1,162

The number of specimens of gonorrhoea received for examination shows a marked increase during the past twelve months as compared either with the period immediately preceding this or with any twelve-month period. It should be unnecessary to emphasize the fact that failure to find gonococci in cases of suspected subacute or chronic gonorrhoea in either sex should not be considered as definite evidence that the disease is not present. This is true even after smears have been repeatedly taken and examined.

Glanders

Table X—Specimens Examined for Glanders

	+	—	?	Total
*1918-19	6	22	10	38
1919-20	5	69	11	85
Total	11	91	21	123

As heretofore, the complement fixation test is the method now employed in this laboratory in the diagnosis of glanders.

Pneumonia

Table XI—Specimens Examined for Pneumonia

	Type I	Type II	Type III	Type IV	—	Total
*1918-19	1	2	..	9	2	14
1919-20	..	3	6	23	9	41
Total	1	5	6	32	11	55

* Nine month period.

Although the laboratory has been prepared to do pneumococcus differentiation during the period covered by this report, a comparatively small number of specimens has been received, 55 in all. Of these only one proved to be Type I, which is probably due to the fact that most of these specimens came from pneumonia complicating influenza. This explains the large preponderance of pneumococci of Type IV.

At a meeting in Hartford where the work of the laboratory was under discussion it was stated by some physicians that they had difficulty in securing antipneumococcus serum. It was suggested that it would be an advantage if the laboratory could, in some way, provide this. Accordingly, a small supply of antipneumococcus serum, Type I, has been kept at the laboratory during the past year and notice to this effect was published in the State of Connecticut Health Bulletin. In spite of this no requests from any outside physicians have as yet been made for the serum.

Malaria

Table XII—Specimens Examined for Malaria

	+	—	?	Total
*1918-19	..	19	..	19
1919-20	1	53	..	54
Total	1	72	..	73

This table for malaria is interesting. Of the 73 smears which have been received for the examination of malaria during the past twenty-one months only one has proven positive.

To one who has had the opportunity of examining smears for malaria over a long period, this is in most striking contrast to the results which were obtained even a few years since. Positive malarial smears were then common. At present these are found so infrequently that the average laboratory worker does not have sufficient opportunity to become familiar with the malarial parasite.

Rabies

Table XIII—Specimens Examined for Rabies

	+	—	?	Total
*1918-19	26	25	..	51
1919-20	3	21	..	24
Total	29	46	..	75

* Nine month period.

It is pleasing to note that a comparatively small number of specimens has been received at the laboratory for examination for rabies and during the past year only 3 of these have been positive. These results are in decided contrast to those previously obtained in this laboratory, even to those obtained during the nine-month period 1918-19, in which there were 26 positive specimens out of a total of 61. It seems desirable to again emphasize the importance of keeping dogs alive a few days when they have bitten persons but have not developed symptoms of the disease, instead of immediately killing them. If the animal has rabies the symptoms will shortly develop and there is a better chance of finding the Negri bodies at this stage than in the very early stage of the disease. The incubation period in man is sufficiently long so that there is no undue danger in a few days' delay before beginning the treatment.

CHEMICAL DEPARTMENT

Water and Sewage Analysis

In the chemical department of the laboratory are made the examinations of water and sewage, and also the examination of milk, both chemically and bacteriologically. This department has been in charge of Mr. P. E. Bransfield as chief chemist with Miss E. Louise Smeallie as assistant chemist during the entire period covered by this report. The equipment of the chemical laboratory for examination of water, sewage, and milk is housed in a single room which is quite too small for the needs of the laboratory. As a result it is badly overcrowded. This is most unfortunate but will necessarily continue while the laboratory remains in its present quarters. The probable increase in the demands upon the chemical laboratory which may reasonably occur in the near future make the problem of meeting it a difficult one. As seen from Table I, the number of specimens of water and sewage examined each year for the past ten years has shown a comparatively small amount of variation until the year 1917-18. During that year there was a marked increase in the number. The number since then has been higher than in previous years but not equal to that of 1917-18. In considering these figures, however, it is to be recalled that only part of the examinations of sewage are now made in this laboratory, others being made in the laboratory of the Bureau of Sanitary Engineering. Table XIV shows the number of samples of water, sewage, and ice examined each month during each of the periods included in this report and the number of towns from which these have come.

Table XIV—Specimens of Water, Sewage and Ice

	Samples of water	Samples of sewage	Samples of ice	Total	No. of towns sending samples
*1918-19					
October	38	4	..	42	23
November	33	2	..	35	22
December	72	6	..	78	29
January	39	6	4	49	25
February	45	..	..	45	22
March	53	6	1	60	29
April	84	4	..	88	25
May	71	4	..	75	31
June	91	4	..	95	42
Total	526	36	5	567	248
1919-20					
July	124	4	..	128	42
August	69	2	..	71	29
September	93	4	..	97	36
October	110	3	..	113	42
November	63	2	..	65	29
December	67	5	..	72	42
January	51	2	..	53	28
February	41	..	..	41	16
March	82	2	3	87	31
April	74	2	1	77	28
May	59	2	..	61	24
June	108	4	..	112	52
Total	941	32	4	977	399

A small number of towns in the State send samples of water from their public supplies each month for examination. These towns are as follows: Ansonia, Cromwell, Danbury, Madison, Meriden, Middletown, Naugatuck, Southington, Terryville, Thomaston, Waterbury, Willimantic, Canaan, Norwich and Seymour. From New Haven samples are received each week from five sources of supply for bacteriological examination. Other towns send samples at irregular periods, such as New London, Rockville, Unionville and South Manchester. Occasionally there are samples from some of the other towns in the State. As is apparent from this list, most of the towns in the State either do not send samples of water at all for examination or at most at only very irregular intervals. There are a few towns, such as Hartford, New Haven and Bridgeport and some others where regular examinations are made of the water supplies by private laboratories. How frequent the examinations of a water supply should be depends upon the local conditions. This

*Nine month period.

problem is one with which the Bureau of Sanitary Engineering has to do and will not be discussed here. We are fully impressed by the fact, however, that the public water supplies should be much more frequently examined, both chemically and bacteriologically, than is now being done. A number of the surface supplies in the State are in danger of pollution of the drainage area and frequent examination of the water is evidently necessary.

The laboratory is frequently called upon to make examination of water from private wells. It does this as a routine only when requested by the health officers. Any health officer can obtain an outfit for sending water by using a Requisition Blank, which can be obtained from his county health officer. Only such examinations are made at this laboratory as are considered to be of importance from the standpoint of public health. Samples of water submitted for other than sanitary examinations are not analyzed.

Directions for Taking Samples of Water for Analysis

In collecting samples of water for analyses, it is well to remember that water analysis deals with material in very minute quantity, and any carelessness in taking the sample may vitiate the results. The samples should be delivered to the laboratory as soon as possible after collection.

The laboratory outfit for water consists of a two-liter wide-mouth glass-stoppered bottle for the collection of the sample for chemical analysis, and a small sterile four-ounce bottle for the collection of the sample for bacteriological examination. These are packed with cotton waste in a wooden box, which is shipped by Parcel Post, and directions are given to return them in the same manner by special delivery. Samples which are sent in the morning usually reach the laboratory the same day, and samples shipped in the afternoon or evening usually reach the laboratory the following morning. Directions for taking the samples are printed on the data blank which is sent out with the containers. It is desirable to have the samples collected by a person who understands aseptic methods, as one who is careless may introduce foreign matter, including bacteria, in amounts sufficient to ruin the accuracy of the test. To prevent the sample lying in the post office or express office, or arriving at the laboratory after our closing time on Saturday, it is requested that samples be shipped not later in the week than Thursdays. The examination is begun promptly when the sample reaches the laboratory.

The laboratory has only a limited supply of water containers. These are not to be retained for any undue length of time by those to whom they are sent. It is requested that they invariably be returned promptly with the samples to be examined. Examina-

tions of water, physical, chemical and bacteriological, are made in this laboratory in accordance with the Standard Methods of Water Analysis adopted by the American Public Health Association. A report of the results, together with the interpretation of these, is sent to the person shipping the sample, a duplicate copy is sent to the Commissioner of Health, and another copy kept in the laboratory files. Interpretation of the results of a sanitary water analysis is much more difficult than the analysis itself, requiring the opinion of an expert. On the back of the sheet on which the results are reported there is a brief outline which gives some idea of the method of interpreting the various results.

Milk Analysis

In the last Biennial Report attention was called to the continued decrease in the number of specimens of milk which had been received for examination. It was there pointed out that this decrease had extended over a series of years. In fact, the highest number of samples received was in the year 1912-13. Since that time there has been each year almost without exception, as shown in Table I, a decrease in the number of specimens. For the past year the total number examined is very slightly in excess of those examined in 1917-18. During the nine-month period 1918-19, 1,339 samples were received and during the year 1919-20, 1,795. This comparatively small number of specimens which is examined annually at the State Laboratory should be a matter of concern to all interested in public health problems, particularly in that of infant mortality.

It is hardly within the province of this laboratory to take active steps for increasing the number of these specimens. The director, however, is very strongly of the opinion that it is incumbent upon those having supervision of the production and distribution of milk in the State to take active steps whereby the laboratory is much more fully utilized in studying their problems. At the present time many of the samples of milk which are received at the laboratory have not been kept properly cold during transit and as a result the bacteriological examination is of almost no value. In order to rectify this these samples must, in some way, be kept properly iced from the time they are obtained until they reach the laboratory, and furthermore, they should, in some way, be very promptly brought to the laboratory.

One of the most important milk problems at the present time is that of pasteurization of practically all the milk which is produced that is to be used for human consumption. Only a very few dairies are so carefully and constantly supervised that their product can be considered safe for use without pasteurization. But in order to insure that pasteurization is properly carried out

repeated examinations of the output of every pasteurizing plant should be made at very frequent intervals. This involves the taking of samples of the raw milk before pasteurizing and also samples at the various stages of the process, including milk bottled ready for sale after pasteurizing. Only by such wholesale pasteurizing, thoroughly controlled, can the milk supply be considered safe. During the past year the laboratory has been called upon by the Commissioner on Domestic Animals to test the results obtained in two pasteurizing plants in one of the cities of the State. The number of samples examined from these have not been sufficient to secure any data for publication. They have, however, impressed those who have seen the results with the absolute necessity of very close coöperation on the part of State officials with those operating such plants.

C. J. BARTLETT, M.D.,

Director Bureau of Laboratories.

**REPORT OF THE BUREAU OF ENGINEER-
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REPORT OF THE BUREAU OF ENGINEERING

John T. Black, M.D., Commissioner of Health:

I have the honor to submit the report of the Bureau of Engineering for the fiscal period October 1, 1918, to June 30, 1920.

The work of this Bureau includes the examination, approval and filing of plans, specifications and maps of public works and of private works and institutions serving the public; investigation of conditions as a result of complaint or petition, surveys of institutions, inspection of watersheds, water and sewage disposal works, and various engineering duties in coöperation with other Bureaus of this Department and other state departments.

PUBLIC WATER SUPPLIES

At the time of the organization of this Bureau three years ago, there were very few maps or plans of water works on file in this office, as up to that time such filing was optional. As the state now requires the filing of these plans and maps, with such additional information as the Bureau may request, every effort has been made to secure compliance. Considerable difficulty has been encountered in this endeavor, as many of the smaller companies do not have duplicate sets of maps and plans and, what is more astonishing, a large number have no plans or records of their works or systems.

At the present time satisfactory maps and plans of about one-half the water companies of the state are on file.

Water works, both publicly and privately owned, number 90, and these supply a total of 142 communities, representing a population of 1,088,196, or approximately 73 per cent. of the total population of the state.

The sources of supply of 78 of these 90 works are from lakes, ponds or streams, and 12 are from wells or springs.

Seven of these water work systems protect their supply by filtration and twenty-four by chlorination.

The communities supplied with water in the state at the present time are as follows:

Municipal Works

Bristol	Moriden	Putnam	West Hartford
Danbury	Middletown	Southington	Winchester
East Hartford	New Britain	South Norwalk	Windham
Forestville	New London	Wallingford	Windsor
Groton	Norwalk	Waterbury	Winsted
Hartford	Norwich	Watertown	

Private Works

Agawam	Enfield	Naugatuck	South Manchester
Ansonia	Essex	New Canaan	Southport
Avon	Fairfield	New Hartford	South Coventry
Baltic	Falls Village	New Haven	Sprague
Beacon Falls	Farmington	Newington	Springdale
Bethel	Glasco	New Milford	Stafford
Birmingham	Glastonbury	Newtown	Stafford Springs
Branford	Glenbrook	Norfolk	Stamford
Bridgeport	Granby	Noroton	Stonington
Broad Brook	Greenwich	North Canaan	Stony Creek
Brooklyn	Griswold	North Haven	Stratford
Burlington	Griswoldville	Orange	Suffield
Canaan	Guilford	Pawcatuck	Tariffville
Canton	Hamden	Pine Meadow	Terryville
Cheshire	Harwinton	Pine Orchard	Thomaston
Chester	Hazardville	Plainville	Thompsonville
Clinton	Highland Park	Plymouth	Tokeneke
Collinsville	Huntington	Portland	Tolland
Cornwall	Jewett City	Ridgefield	Torrington
Coventry	Kent	Rockville	Unionville
Cromwell	Killingly	Salisbury	Vernon
Danielson	Lakeville	Saybrook	Warehouse Point
Darien	Ledyard	Scitico	Washington
Derby	Lisbon	Seymour	Westbrook
Deep River	Litchfield	Sharon	West Haven
Durham	Lyme	Shelton	Westport
East Haven	Madison	Shippan Point	Wethersfield
East Lyme	Manchester	Simsbury	Windsor Locks
East Windsor	Milford	Somers	Woodbury
Ellington	Mystic	South Glastonbury	Woodbridge
			Woodmont

Water work systems at which filter plants are operated, with the method of filtration, are as follows:

Slow Sand	Mechanical	Sand and Gravel
Farmington	New Canaan	Litchfield
New Haven		Sharon
Putnam		
South Norwalk		

Chlorinated Supplies

Ansonia	Greenwich	New Britain	Wallingford
Branford	Groton	New Haven	Waterbury
Bridgeport	Hartford	Norwalk	Watertown
Cromwell	Meriden	Shelton	Willimantic
Danbury	Middletown	Stamford	Windsor
Derby	Milford	Torrington	Windsor Locks

APPROVALS OF WATER WORKS

Section 2529 of the General Statutes forbids the construction of any system of water supply owned or used by a municipality, private corporation or individual until the plans have been sub-

mitted and approved by the State Department of Health. In accordance with this act, the following approvals have been granted:

Cromwell

March 16, 1920, application received for approval of plans for extension of about 2,000 ft. to the present distribution system and for treatment with chlorine gas. Approval granted March 22, 1920.

Enfield

February 10, 1919, application received for approval of additional water supply for the Hazardville and Scitico supply to be taken from a new artesian well. Approval granted February 24, 1919.

Norwalk

March 4, 1919, application received for approval of plans for addition to the water supply system of the Second Taxing District of the City of Norwalk. Supply to be taken from Wilton Reservoir, Huckleberry Pond and North Wilton Reservoir. Approval granted April 25, 1919.

Old Lyme

August 30, 1918, application received for approval of water supply system for Point O' Woods Beach in the Town of Old Lyme. Said water to be secured through a driven well located on the south side of the tracks of the New York, New Haven, and Hartford Railroad, east of South Lyme Station. Approval granted August 1, 1919.

Stafford

August 9, 1918, application received for approval of plans for new system of water supply for the Town Alms House at West Stafford, supply to be taken from spring on land of F. Fairchild. Approval granted January 8, 1919.

WATERSHED INSPECTION

For the first time in the history of the state, every watershed was inspected by engineers from this Bureau within a period of twelve months. While it was known that many of these sheds did not receive the attention necessary to properly protect the water supply, we were surprised to find quite a number of conditions highly prejudicial and which should not have been permitted under any circumstances. As a result of this survey and our report to the water companies, there has been quite an improvement in the condition of watersheds in general.

Every effort was made by this Bureau to carry out these surveys in cooperation with the officials of the water companies, and we are glad to say that with few exceptions these officials appreciated the efforts of the Bureau and undertook to have unsatisfactory conditions promptly remedied.

List of Watersheds Inspected

Town	Shed	Company
Ansonia	Beaver Brook	Ansonia Water Co.
"	Black Brook	" " "
"	No name	Fountain Water Co.
Avon	No name	Avon Water Co.
Baltic	No name	Baltic Water Co.
Bethel	Mt. Lake	Eureka Water Co.
"	Chestnut Ridge	" " "
Bridgeport	Means Brook Reservoir	Bridgeport Hydraulic Co.
"	Conduit Reservoir	" " "
"	Aspetuck	" " "
"	Easton No. 1	" " "
"	Easton No. 2	" " "
"	Hemlocks	" " "
"	Samp Mortar	" " "
"	Horse Tavern	" " "
"	Bunnells Lower	" " "
"	Bunnells Upper	" " "
"	Trap Falls	" " "
"	Beaver	" " "
"	Island Brook	" " "
"	Trumbull	" " "
"	Far Mill River	" " "
"	Canoe Brook	" " "
Bristol	Poland River	Municipal
Broad Brook	No name	Broad Brook Mfg. Co.
Clinton	Menunketesuck	Guilford-Chester Water Co.
Collinsville	Nepaug Reservoir	Collinsville Water Co.
Cromwell	Nooks Pond	Cromwell Water Co.
Danbury	West Lake	Municipal
"	East Lake	"
"	Kohanza Reservoir	"
"	Padanaram "	"
Danielson	Tlygeia Reservoir	Crystal Water Co.
"	Chase "	" " "
Derby	No name	Birmingham Water Co.
Durham	Fowlers Brook	Durham Center Water Co.
"	No name	Durham Aqueduct Co.
East Hartford	Roaring Brook	Municipal
Ellington	No name	Ellington Water Co.
Falls Village	No name	Falls Village Water Co.
Farmington	No name	Farmington Water Co.
Granby	Bissell Brook	Salmon Brook Water Co.
Greenwich	Putnam Lake	Greenwich Water Co.
"	Horseneck Brook	" " "
"	Rockwood Lake	" " "
"	Pipen Brook	" " "
Griswoldville	No name	Griswoldville Water Co.
Groton	Groton Reservoir	Municipal

Town	Shed	Company
Hartford	Nepaug	Municipal
"	Reservoir 1	"
"	" 2	"
"	" 3	"
"	" 4	"
"	" 5	"
"	" 6	"
Hazardville	2 wells	Hazardville Water Co.
Jewett City	No name	Jewett City Water Co.
Kent	Mt. Algo	Kent School Corp.
"	No. name	Kent Water Co.
Lakeville	Reservoir 1	Lakeville Water Co.
"	" 2	" " "
"	" 3	" " "
"	" 4	" " "
Litchfield	No name	Litchfield Water Co.
Lyme	2 wells	Hale & Hilliard Co.
Manchester	Wilsons Brook	Manchester Water Co.
"	Porter Reservoir	South End Water Co.
"	Howard "	" " " "
"	Taylor "	" " " "
Meriden	Kenmere Reservoir	Municipal
"	Broad Brook "	"
"	Hallmere "	"
"	Elmere "	"
"	Merimere "	"
"	Johnson Hill "	"
Middletown	Higby Mountain	Municipal
"	Laurel Brook	"
Milford	Beaver Brook	Milford Water Co.
Mystic	Palmer Pond	Mystic Valley Water Co.
"	Dean Pond	" " " "
"	Mistuxet Brook	" " " "
Naugatuck	Prospect	Naugatuck Water Co.
"	Straitsville	" " "
"	Long Hill Brook	" " "
"	Candee Brook	" " "
"	Mulberry Hill	" " "
New Britain	Shuttle Meadow	Municipal
"	Whigville	"
"	Woolcot	"
New Canaan	Five-Mile River	New Canaan Water Co.
New Hartford	Spruce Brook	Village Water Co.
"	South Mountain Brook	New Hartford Water Co.
New Haven	Lake Dawson	New Haven Water Co.
"	" Watrous	" " " "
"	" Chamberlin	" " " "
"	" Whitney	" " " "
"	" Saltonstall	" " " "
"	" Bethany	" " " "
"	" Wintergreen	" " " "
"	" Maltby	" " " "
"	Mill River	" " " "
"	Farm River	" " " "
Newington	No name	Natural Spring Water Co.
"	Well	Maple Hill Water Co.
New London	Lake Konomoc	Municipal
"	Aux. No. 1	"
Newtown	Taunton Lake	Newtown Water Co.

Town	Shed	Company
New Milford	Reservoir 1	New Milford Water Co.
"	" 2	" " " "
"	" 3	" " " "
"	" 4	" " " "
Norfolk	Lake Wangum	Norfolk Water Co.
Noroton	Stamford Water Co.	Noroton Water Co.
North Canaan	No name	North Canaan Water Co.
Norwalk	Stauns Pond	Municipal
Norwich	Stony Brook Reservoir	"
"	Fairview	"
"	Meadow Brook	"
Orange	Grassy Hill	Orange Water Co.
Plainville	Crescent Lake	The Plainville Water Co.
Portland	Meshomasick Brook	Portland Water Co.
Putnam	Roseland Lake Reservoir	Municipal
Ridgefield	No name	Ridgefield Water Co.
Rockville	Lake Snipsic	Rockville Water Co.
Seymour	Reservoir 1	Seymour Water Co.
"	" 2	" " " "
"	" 3	" " " "
Sharon	Beardsley Pond	Sharon Water Co.
Simsbury	Stratton Brook	Village Water Co. of Simsbury
"	Grimes Brook	" " " "
Somers	No name	Fuller & Hurd Water Co.
Stafford Springs	Roaring Brook	Stafford Springs Aqueduct Co.
Stamford	Mill River	Stamford Water Co.
Sound View	2 wells	Sound View Improvement Co.
South Coventry	Lake Wangum	South Coventry Water Co.
South Glastonbury	Upper Reservoir	South Glastonbury Water Co.
"	Lower	" " " "
Southington	Humiston Brook	Municipal
Springdale	3 wells	Springdale Water Co.
Tariffville	Marsh Pond	Tariffville Water Co.
Terryville	Reservoir No. 1	Terryville Water Co.
"	" 2	" " " "
"	" 3	" " " "
Thomaston	No name	Thomaston Water Co.
Thompsonville	No name	Thompsonville Water Co.
Tolland	No name	Tolland Aqueduct Co.
Torrington	North Pond	Torrington Water Co.
"	Whist Pond	" " " "
"	Hatcha Lake	" " " "
"	Marshall Lake	" " " "
Unionville	No name	Unionville Water Co.
Wallingford	Pistapaug Pond	Municipal
"	Lanes Pond	"
Washington	No name	Woodruff Water Co.
"	3 wells	Washington Water Co.
Waterbury	Prospect Reservoir	Municipal
"	East Mt.	"
"	Wigwam	"
West Simsbury	Hop Brook	Village Water Co. of Simsbury
Willimantic	Hosmore Mt. Reservoir	Municipal
"	Natchaug	"
Windsor	Barber Pond	Municipal
Windsor Locks	Cold Brook	Windsor Locks Water Co.
Winsted	Rugg Brook	Municipal
"	Crystal Lake	"
"	Mad River	"
Woodbury	South Brook	Woodbury Water Co.

SPECIAL INVESTIGATIONS—WATER SUPPLIES

Many requests for information concerning water supplies have been answered by telephone and mail, but those of more complicated character have been taken up by our engineering force and the works causing the trouble visited.

The most interesting of these problems are summarized as follows:

Ansonia

At request of officials, inspected watershed and reservoirs of the Fountain Water Company August 13, 1919. The Company has two reservoirs, one of which is used for storage purposes. The distributing reservoir supplies about 6,800 people and there are about 15½ miles of main pipe. During dry seasons water is obtained from the Birmingham Water Company, which is directly connected with the main reservoir. Under ordinary conditions, the supply comes from two brooks, Fountain Lake and King Brook. The shed of the former was thoroughly clean, but the latter was in an insanitary condition caused by picnickers and was not protected against accidental pollution. The storage reservoir has a capacity of 250,000 gallons. The two brooks which supply it were in good condition. Recommended that picnic parties be prohibited on the watershed, precaution taken against accidental pollution where Danbury turnpike passes, and that deadwood, overgrown grass and brush on brooks supplying Bungay reservoir be cleaned up.

Brookfield

On complaint of Health Officer, inspection of ice pond of Clarence Hawley was made December 26, 1918. The ice was said to be used in connection with food supplies reaching New Haven and the water for domestic purposes by the family living on the farm. The earthen banks surrounding the pond were broken down in several places, which permitted the drainage from the barnyard to flow directly into it. Cattle had access to the pond for drinking. It was recommended that the spring be cleaned out and enclosed in concrete, and that the use of the pond as a source of supply be stopped until its present condition was remedied.

Buckland

By request, inspected wells and spring at the Connecticut Sumatra Tobacco Company. From 200 to 400 employees use this water. Samples taken showed that all but one source of supply was contaminated. Recommended that the Healy Spring, which has the most adequate supply, be cleaned out and walled

up with concrete and provided with a tight cover. If analyses then proved favorable, that it be piped to the plantation and used for all purposes.

Collinsville

On complaint, inspected the Nepaug reservoir of the Hartford supply, September 17, 1919. The water had an objectionable odor resembling that of hydrogen sulphide. Paint on the houses near the water was affected by it, and in some cases, turned almost black. The matter was taken up with the officials, who promised to investigate. On reinspecting the reservoir a month later, odor had practically disappeared. There have been no further complaints.

Cromwell

On the initiative of the Department, made two inspections of the Cromwell Watershed, September 26 and October 15. The supply is derived from a brook and a series of springs which feed three small reservoirs. There are two pumping units and between seven and eight miles of distributing mains which are flushed yearly or oftener if necessary. It serves about 1,400 people. Cattle were pastured on the shed and drank from the water's edge. All the dwellings on the shed were in a sanitary condition except one, the cesspool of which overflowed and drained into the second reservoir. Recommended that the cesspool be replaced by a water-tight vault or that a chemical closet be installed and the Company chlorinate the water. Recommendations adopted and carried out. Inspection was made December 26, 1919, of operation of newly installed chlorinator, which appeared to be working satisfactorily.

Darien

At request of Health Officer, inspection was made of Tokeneke reservoir in order to determine cause of high organic and chlorine content. The reservoir is situated very near the salt water, and this probably accounts for the high chlorine found in the water.

Farmington

At request of officials and as a result of conference with Public Health Council and Commissioner, a survey of the reservoir of the Farmington water supply was made August 28, 1919. Previous recommendations had been only partly carried out, and there were many improvements yet to be made. Recommended that the walls of the clear water reservoir be repaired to prevent surface wash from entering; that the fence enclosing

property be repaired, and the main gate which was generally left open, be locked, that the intake chamber be repaired, location of valve changed, depth of sand beds increased, that a covered collecting chamber replace the present open ditch by which the filtered water is carried to the reservoir, and that precautions be taken to harvest ice cut from the reservoir in a sanitary manner.

Groton

On the initiative of the Department, inspected Groton reservoir and watershed August 2, 1919. The sources of pollution on this shed are so numerous that it would be difficult and costly to remove them. The Company agreed to install a chlorinating apparatus and were advised that while this would afford protection, it would not improve the physical characteristics of the water.

Groton

At request of Health Officer, an inspection was made July 10, 1919, of a spring on Thames Street, used as a public drinking place and supplying a watering trough. The spring was receiving contamination from the ground through which it flowed where there had at one time been a number of privies and cesspools. Advised that the piping be so arranged as to supply the watering trough alone. Also inspected overflowing cesspools which filled with ground water immediately upon being dug. The only permanent remedy is the extension of the sewer system to include this district. Privies and sink drains of the houses along the east bank of the river were in an insanitary condition and should be connected with the Thames Street sewer.

Hadlyme

On complaint, an inspection was made May 15, 1919, of the pollution of River Ledge reservoir, from which about forty customers are supplied with ice. The pond is fed by a small brook rising in a swamp. Because of possible contamination from a barnyard on the surrounding property, advised that they either install a septic tank or tight cesspool, or extend the drain so that it will discharge below the pond.

Hebron

On request, inspection was made June 3, 1920, of a farmhouse near the Amston Station, to determine if the sanitary conditions were such that it could be recommended as a summer boarding place by the Jewish Agricultural and Industrial Aid Society of New York. Inspection disclosed that the former tenant, who kept summer boarders, had so neglected ordinary sanitary pre-

cautions that the owner of the property was forced to evict him. On the date of the inspection the sanitary conditions about the place were satisfactory and the Society was advised that while the present management continued they would be safe in recommending it as a suitable boarding place.

Hockanum

On complaint, investigation of ice pond of Mr. Grant was made, July 3, 1919. Sewage was discharging into it from six houses nearby. Recommended that backyards be cleaned up and the houses connected with the sewer.

Kent

At request, made a reinspection of Kent Village water supply July 21, 1919. The water was very muddy, the reservoir not having been cleaned out for six years, and there was a noticeable taste and odor due to algae growth. General conditions were unsatisfactory. A large privy and barn are located near the reservoir. No fence protects the reservoir from the highway passing near it. Recommended precautions against contamination from privies, barnyards, pigsties and properties to the north be taken, and periodical analyses be made.

Mansfield

By request of Dr. La Moure, Superintendent, visited Mansfield State Training School and Hospital May 5, 1919, to obtain information regarding the proposed water supply for that Institution and Storrs Agricultural College. The Mansfield School emergency supply was approved, but a chlorinating outfit should be installed immediately.

New Fairfield

At request of New York Department of Water Supply, made a reinspection of Jennings and Turner Farm, July 21, 1919. Conditions were fairly satisfactory. All sources of contamination to Quaker Brook, which carried the pollution to the Croton River, had been removed.

New Hartford

On complaint, inspected March 14, 1919, Greenwood pond of the Trout Brook Ice Company, situated on the west branch of the Farmington River. Investigation showed that proper sanitary measures were being taken in harvesting the ice.

Newington

On the initiative of the Department, made a reinspection of the Newington water supply, September 8, 1919. The supply is

taken from a small brook a mile west of the village on which there is a dam. About three-quarters of a mile of 2½" supply line serves thirty families. About forty cows graze on the banks and wade in and drink the water from the brook. A barn for additional cows is being built. On account of the inadequate storage capacity of the reservoir, and the general insanitary conditions of the supply, it was ordered abandoned not later than June 1, 1920.

Norwich

At request of Health Officer, inspected pollution of spring in Mohican Park, July 18, 1919. There were no houses or privies near it, and the pollution evidently came from some distance. The spring is not used continuously. Advised that it be closed until the source of contamination could be located.

Norwich

On request, inspected well of E. C. Carpenter, August 29, 1919, to determine cause of disagreeable odor of water. Supply was free from contamination and a thorough cleaning seemed to be all that was necessary to remedy the trouble.

Portland

On complaint, inspected the Portland Water Company system December 17, 1919. The source of the supply is a small mountain stream. There are 19 miles of pipe line and 600 service connections. There is always an abundance of water except during an exceptionally dry year. The entire system is flushed thoroughly every four months. The area of the shed is about 3½ square miles on which are two small shanties and one farm house. The occupant of one shanty keeps a horse and pigs, but the drainage cannot get into the reservoir. The other places are in a sanitary condition.

South Meriden

On the initiative of the Department, made a reinspection of Bernstein reservoir, South Meriden. On date of inspection, the water was clear and very little algae was present. But samples taken of the water and the results of former investigation of the shed showed that the supply was unsafe and it was, therefore, ordered that its use be discontinued for domestic purposes not later than June 1, 1920.

Stonington

On complaint of Health Officer, investigation was made February 8, 1919, of a threatened pollution of ice pond of L. A. Cheseborough by a building about to be erected 25 feet away, the sewage from which would empty into the pond. As a result of the inspection, plans for building were abandoned.

Wallingford

On request of Dr. Lyman, Superintendent, installed emergency chlbrinator at Gaylord Farm Sanatorium August 1, 1919, to treat the water supply of that institution, analyses of which had shown contamination for some time.

Washington

On complaint of Bridgeport Health Officer, inspection was made of spring supplying Mitchells Certified Dairy and dwelling houses, December 30, 1918. The well is supplied by an underground spring and the surrounding property was kept in clean condition. The top of the well was poorly protected by loose boards and there was a possibility of pollution by surface wash draining into it. Recommended the construction of a concrete curb and a tight cover as a preventive.

Waterville

On complaint of consumers, inspected Welton private water supply system at Waterville, November 8, 1919. Supply found to be poorly protected against accidental pollution. Filters and distribution system were in need of a thorough cleaning and overhauling. Samples taken all showed varying degrees of contamination. Residents were advised to discontinue the use of the water until necessary improvements in the system had been completed.

West Hartford

On complaint, made an investigation of taste and odors in West Hartford water supply March 11, 1919. The City of Hartford, in order to protect supply from accidental pollution by laborers working on new filter plant, was treating the reservoir during the recent heavy rain with a dosage of chlorine about 8 parts per million. The ordinary dosage is about .6 to .65 parts per million. The reservoir supplies about 165,000 people, and in view of the danger, the Company's action was thought to be warranted.

Westport

By request of Health Officer, inspected March 19, 1919, two wells that were receiving contamination from surface wash, one of which had caused an outbreak of typhoid fever a year previous. One well was put in a sanitary condition. No action taken by owner of the other well.

Windsor Locks

By request of Mr. Montgomery, General Manager, inspected water supply of the Windsor Locks Water Company, October 23,

1918. There is a possibility of pollution from the exposed location of the ponds to the highways which pass close to them, and from laborers working in the tobacco fields at the head of the brook, who use the paths in access to it for drinking purposes. Recommended that they treat the ponds with copper sulphate to remove the algae growth and eliminate tastes and odors, and that a chlorinating outfit be installed to protect against the possibility of accidental pollution.

Windsorville

By request, inspected pond in East Windsorville, September 13, 1919. Cause of complaint was a leak in the dam which caused the water to drop about two feet, preventing the algae growths from leaving the pond. On date of inspection, the leak had been repaired, water was flowing over the dam, and the algae growth was gone from the pond. The writer who had requested the visit was not known to residents of the Town.

Winsted

On request of Health Officer, made an inspection of watershed and reservoirs of the Winsted Water Company, September 10-11, 1919. There is little possibility of contamination from the houses on the watershed, as they are not located on any feeder stream and are in fair condition. The only direct source of contamination comes from a drove of pigs kept in a field near a brook which flows directly into the lake. Recommended that this condition be cleaned up.

WELLS AND SPRINGS

In this state health officers have the privilege of taking water for analysis from any supply of water which is suspected to be polluted or the cause of illness. A copy of the analyses made for this purpose is supplied to this office, and a study has been made to ascertain the cause of pollution and what measures were taken for relief. The engineers of this Bureau have, in addition, taken a large number of samples, particularly on investigations in conjunction with studies of outbreaks of disease.

Samples were taken by the Bureau of Engineering during the past year from the following places:

Wells

Ansonia	Colchester	Farmington	Madison (2)
Ashford	Cornwall (2)	Groton (2)	Mansfield (5)
Branford	Danbury (3)	Guilford	Middletown
Bridgeport (2)	Darien	Killingly	New Britain (3)
Canton (3)	Eastford (3)	Litchfield (3)	New Haven (3)
Chester (2)	Ellington	Lyme	Newtown (2)

Wells (concluded)

North Canaan	Salisbury	Thomaston (2)	Winchester
North Haven	Saybrook	Trumbull	Windham
Old Saybrook	Seymour (51)	Wallingford	Windsor
Putnam (3)	Sprague	Waterford (2)	
Redding	Stamford	Watertown	
Ridgefield (6)	Sterling (2)	Westport	

Springs

Danbury (4)	Groton (2)	North Canaan (2)	Wallingford (15)
Derby (3)	Hartland	Plainfield (2)	Waterbury (3)
Eastford (2)	Huntington	Ridgefield	Winchester
Ellington	Killingly	Salisbury	
Farmington	Manchester	Stamford	

WATER—INTERSTATE CARRIER SERVICE

By agreement with the U. S. Public Health Service, this Department regularly inspects watersheds and secures samples for analysis at all points where water is supplied to interstate carriers. Inspections were made during the past year at the following points:

Bridgeport	Litchfield	New Haven	Stamford
Colchester	New Britain	New London	Suffield
Hartford	New Hartford	Saybrook Point	Willimantic
			Winsted

EMERGENCY SERVICE

Ever since the Bureau of Engineering was organized, an emergency equipment has been held in readiness for the protection of any supply which demands immediate chlorination because of gross pollution or because of a break-down of a local chlorinating equipment. This emergency apparatus can be installed within a few hours anywhere in the state, and has during the last two years served its purpose on three different occasions.

A greater emergency arose during the spring of 1920 when, because of a general freight embargo, water companies were unable to secure their regular supply of chlorine. Owing to the heavy snowfall during the winter, it was very necessary that adequate chlorination should not be discontinued during the time of freshet. Realizing the seriousness of the situation, this Department got in touch with the Public Utilities Commission, railroad and federal officials and was finally able to arrange for a special carload shipment of chlorine from Buffalo to Hartford. While this was being done, a special supply sufficient for two days was secured by truck from Brooklyn, N. Y. Distribution was made from Hartford by truck to the various water companies using chlorine, until the embargo was lifted.

SEWERAGE

The State Department of Health is required to investigate all points of sewage discharge and may examine all existing or proposed public sewerage systems and refuse disposal plants, and may compel their operation in a manner which shall protect the public health. The law does not specifically require the filing of plans for other than proposed new works, but it has been the endeavor of the Bureau to secure for the files of this office maps and plans of existing sewerage systems and sewage disposal works. Our success along this line has been somewhat greater than with water supplies, there being on file at the present time 363 maps and plans relating to sewerage, covering most of the 62 communities containing sewerage systems.

A list of the sewerage systems, of which 19 treat their sewage, is submitted:

Ansonia	Greenwich	North Canaan	Stonington
Baltic	Hartford	Village of Canaan	Stratford
Birmingham	Jewett City	Norwalk	Thomaston
Bridgeport	Kent	Norwich	Thompsonville
Bristol	Lakeville	Plainville	Torrington
Canaan	Litchfield	Portland	Wallingford
Canton	Manchester	Putnam	Washington
Collinsville	Meriden	Ridgefield	Waterbury
Danbury	Middletown	Rockville	West Hartford
Danielson	Naugatuck	Sharon	West Haven
Derby	New Britain	Shelton	Westport
East Hartford	New Canaan	Simsbury	Willimantic
Enfield	New Haven	Southington	Windsor
Farmington	New London	South Manchester	Windsor Locks
Glasgo	New Milford	Stafford Springs	
Granby	Norfolk	Stamford	

Sewage Treatment**Sand Filters**

Bristol	Granby	New Britain	Ridgefield
Danbury	Litchfield	Norfolk	South Manchester
Danielson	Meriden	Simsbury	

Septic Tank**Manchester****Septic Tank and Contact Bed****Rockville****Digestion Tanks, Coke and Sand Filters****Southington****Digestion Tank and Sand Filters****Lakeville****Imhoff Tank and Chlorine**

Greenwich	West Haven
Middletown	Prospect Beach, West Haven

SEWAGE DISPOSAL WORKS

Most of the sewage disposal plants are well constructed and should produce a satisfactory effluent, but in most cases we find the opposite condition. The reason for the ineffectiveness of these plants is almost universally neglect of proper supervision. In some instances it is due to the deleterious effects of factory wastes. Considerable time and energy has been expended in an effort to put the sewage disposal plants in good working order and to have them properly operated. Where industrial wastes are the disturbing factor, special studies have been made to assist in overcoming these difficulties.

APPROVALS OF SEWERAGE SYSTEMS AND DISPOSAL WORKS

Section 2555 of the General Statutes requires the submission of plans and the approval of the same before construction of any sewerage systems or sewage disposal works is begun. The systems and works for which approvals have been granted since October 1, 1918, are as follows:

Collinsville

August 29, 1919, application received for approval of plans for sewage disposal works for the Collins Company in the Town of Collinsville, effluent to be discharged from said disposal works into the river adjoining the location of the proposed septic tank. Approval granted October 17, 1919.

Cromwell

April 10, 1919, application received for approval of private sewage disposal works from houses of A. N. Pierson, Inc., in the Town of Cromwell, effluent to be discharged from said disposal works into natural sand beds east of said disposal works. Approval granted April 17, 1919.

East Lyme

June 10, 1919, application received for approval of plans for sewage disposal works for the Children's Sanatorium at Crescent Beach, effluent to be discharged from said disposal works into a subsoil drainage system located on the premises of said sanatorium. Approval granted July 29, 1919.

Fairfield

December 20, 1919, application received for approval of plans for the installation and operation of a septic tank for the factory of the Du Pont Fabrikoid Company in the Town of Fairfield.

effluent to be discharged from said septic tank into the existing sewer on Mill Plain Road. Approval granted January 5, 1920.

Fairfield

October 6, 1919, application received for approval of plans for sewage disposal works at the plant of the G. Drouve Company in the Town of Fairfield, effluent to be discharged from said disposal works into the waters of Turney's Brook at or near the factory. Approval granted October 17, 1919.

Groton

On February 27, 1920, the United States Submarine Base at Groton was notified that under the tentative approval granted January 18, 1918, to discharge sewage from the base into the Thames River, it was stipulated that within a reasonable time after the war or when directed by the Commissioner of Health, suitable works for the treatment of the sewage would be installed. Upon receipt of the notification, the Commander at the Base took the matter up with the Bureau of Yards and Docks and preliminary plans for disposal works were drawn up and submitted to this Department. Some changes were suggested, the plans returned and the matter is still pending awaiting the submission of final plans.

New London

January 5, 1920, application received for approval of sewer outfall from the north part of the city and to discharge into the Thames River approximately 1,000 ft. from shore and about opposite Farnsworth Street. A temporary approval was granted March 25, with the understanding that when it became necessary, as determined by this Department, the City would install treatment works.

Norwich

On April 6, 1920, the Trustees of the Norwich State Hospital for the Insane, the sewage disposal of which had been before the Department for some time, were notified that the pollution of the Thames River resulting therefrom, was considered prejudicial to public health and were directed to provide for the removal and abatement of sewage pollution on or before July 1, 1922.

Orange

March 15, 1920, application received for approval of extension of sewerage system on Elm Street for a distance of about 1,400 ft. Approval granted April 1, 1920.

Plainville

July 28, 1919, application received for approval of plans for private sewage disposal works on the property of Landers, Frary & Clark in the Town of Plainville, effluent to be discharged from said disposal works into the waters of the Quinnipiac River at a point near said disposal works. Approval granted August 13, 1919.

Plainville

July 28, 1919, application received for approval of sewage disposal works for the Trumbull Electric Manufacturing Co. in the Town of Plainville, effluent to be discharged from said works into the waters of the Quinnipiac, at a point near the disposal works. Approval granted August 13, 1919.

Plainville

July 28, 1919, application received for approval of sewage disposal works for the Plainville Realty Company in the Town of Plainville. Approval granted August 13, 1919.

Ridgefield

February 5, 1919, request received for approval of new sewer system and sewage treatment works for the Town of Ridgefield to discharge the effluent from said treatment works into the waters of the Norwalk River at or near the present filter beds. Approval granted April 8, 1919.

Simsbury

July 8, 1919, application received for approval of sewage disposal works for the Ensign-Bickford Co. in the Town of Simsbury, effluent to be discharged from said sewage disposal works into the waters of the Farmington River. Approval granted April 10, 1919.

INSPECTIONS—SEWAGE DISPOSAL

One or more inspections have been necessary in all instances where requests have been made for the approval of plans for new work, and in addition to the routine inspections above referred to a number of requests for advice and assistance have made field studies necessary.

The most interesting of these problems are briefly described:

Branford

On complaint of the Health Officer of Branford, an inspection was made February 27, 1920, of improper drainage and sewage

disposal at the Harrison Avenue, Center and High Schools. An interview was held with the Superintendent of Schools, Civil Engineer, First Selectman, and Town Health Officer. The Harrison Avenue School was equipped with water-flush toilets, but the ground on which the school is built is low and swampy, and at times of heavy rain the water would back up through the toilets from the cesspools and overflow. About 50% of the children were sick, probably caused by the existing conditions. Privies which were in a very insanitary condition were in use at the Center and High Schools. It was recommended that proper drainage facilities be provided for carrying off the storm and ground water; that flush-toilets be installed at the Center and High Schools; and that a septic tank be put in to treat the sewage from the three schools. No definite action has been taken because of lack of funds.

Branford

On complaint, inspection was made March 25, 1920, of nuisance caused by a break in the sewer pipe on Meadow Street, the poor operation of the septic tank and conditions about the railroad underpass. As a result of the inspection, it was recommended that the sewer, which had been laid too near the surface of the ground, be relaid; that the septic tank which had not been constructed according to the plans approved by this Department, be rebuilt according to the original design; that a cinder bed be constructed and the effluent properly taken care of; and that the tide gate at the railroad underpass be repaired. No action taken.

Brooklyn

On request of Health Officer, inspected December 2, 1919, nuisance at Brooklyn Center caused by two Italian families, the contents of whose sink drains and privies ran onto the ground in their yards or down to a stream which entered an ice pond. About 60 feet away was a swamp caused by an old clogged drainage ditch once used for carrying the surface wash from the surrounding property. Advised that the land be drained off; that the privies be removed to another location and water-tight vaults constructed and cleaned frequently; and that all cutting of ice from the pond be forbidden until the existing conditions were remedied.

Brooklyn

At the request of the Health Officer of Brooklyn, a second inspection was made January 7, 1920, in order to obtain additional information concerning the nuisance created by the drainage from the swamp and the cesspools on properties abutting on the highway, which was contaminating an ice pond. As a

result it was recommended that the highway culvert near the swamp be cleaned out and a ditch with side laterals be dug from this culvert to the swamp to drain off the land; that the present cesspools be filled in and replaced by leaching cesspools to take care of the sink drains; and that chemical toilets be installed.

Darien

At request of Health Officer, visited the Soldiers' Home at Noroton, in relation to apparent pollution from septic tanks through connection with surface drainage sewer. Excavated and uncovered discharge pipe where it enters the highway from the property and discharge seemed to be clear. Recommended that the coloring matter be introduced at the toilets of the home to see if there was any by-passing of the sewage and that result be reported to the Department.

East Lyme

On complaint of Mr. Burdick, Proprietor, investigated, August, 1919, nuisance at Ninigret House of privies adjoining the hotel. Contents were exposed and flies were very much in evidence. However, there appeared to be no danger of pollution to the water supply. Recommended that the existing conditions be remedied.

East Lyme

General inspection was made of the Connecticut Farm for Women, August 19, 1919. In the mean time, at request of Superintendent, plans of septic tanks were furnished November 29, inspection was made of the progress of the work and suggestions made to superintendent and farmer and boss carpenter. On June 21, a further inspection was made at request of Superintendent, Mrs. Key, of condition of the tanks; also, advice given in relation to constructing new well at Allen house, and samples taken of new well. Investigation revealed that septic tanks had not been constructed according to plans. On July 17, further inspection was made and advice given to Mr. Cook, Farm Superintendent, in regard to clogging of pipes, also in relation to wind-mill pump at staff house and disposal system for the Allen house.

East Lyme

On June 30, 1920, an inspection was made at the request of the authorities of the State Farm for Women, of the sewage disposal systems. There are seven sewage disposal systems for the various buildings, consisting of septic tanks and tile disposal fields. Most of these were not working properly due to defects in operation and construction. Suggestions to correct these were carried out

with satisfactory results. Sewage disposal systems were also designed for several of the new buildings.

Fairfield

At request of Doctor Donaldson, Chairman of the Town Sewer Committee, a conference was held on November 18, 1919, with Doctor Donaldson and Health Officer Thielcke, Judge Banks, Mr. Morgan, Selectmen, Town Engineer, by the Commissioner of Health, and Director of the Bureau. Agreed that the Department would make an investigation of the pollution of Ash Creek and Fairfield Beach by the discharges from the Bridgeport sewerage system and of sites for proposed sewage disposal works in the Town of Fairfield. The Department submitted its recommendations to Doctor Donaldson, and the matter is still pending.

Greenwich

At request of Mr. D. W. Merritt, inspected Grassy Island sewage disposal plant January 16, 1919, to ascertain if raw sewage was being by-passed into the Sound. Found that during periods of heavy rain storms a by-pass valve on the shore road was opened. Advised the discontinuance of this practice.

Groton

On complaint of Emergency Fleet Corporation, inspected June 14, 1919, insanitary conditions of Greek restaurant opposite the Groton Iron Works which is used by the employees of the Company. The restaurant has a public toilet in bad shape which empties into a cesspool covered by loose boards, and the sewage leaks out freely, forming offensive pools which attract quantities of flies. Some sewage flows to a brook which crosses the yards of the Groton Iron Works. Recommended that the drain from the cesspool be connected with the Company's sewer system.

Hamden

On the initiative of the Department an inspection was made June 9, 1920, of a septic tank on the property of Mr. Gillies, in order to ascertain whether there was any possibility of contamination to a near-by brook located on the watershed of the New Haven Water Company. The tank was found to be working properly and no danger to the brook from this source existed.

Litchfield

By request of Mr. W. S. Rogers, inspected May 1, 1919, houses owned by the Bantam Ball Bearing Company and method of disposing of their sewage. There were ten houses all equipped

with modern toilet facilities. The sewage empties into a small stream which enters the Bantam River. The Company planned to build a disposal plant at the end of the sewer to take care of the sewage and prevent pollution of the river.

Manchester

On complaint, inspected nuisance at Union Pond, March 25, 1919. Pond is formed by a dam owned by Cheney Brothers. The backwater from it forms a swamp, into which empty the wastes from several factories and the drains from a number of private houses. Mosquitoes are very bad at some seasons. The Town offered to fill the pond up, but owners refused to permit it. The matter is being considered as a part of the general pollution of Lydall Brook.

Mansfield

On the initiative of the Department, inspected Mansfield State Hospital sewage filters, July 28, 1919. The plant consists of a dosing tank 10' x 15' with a Miller automatic syphon and a screen chamber with a coarse bar screen. There are four beds covering an area of about one acre. The beds showed lack of care and were badly clogged. The area is inadequate for the present population, but there is plenty of room for enlargement.

Mansfield

On the initiative of the Department, inspected sewage filters at Storrs State Agricultural College, July 28, 1919. The entire population of the Institution during the school term is about 350. There are fourteen houses which are not connected with the sewer system, and these are provided with cesspools. The disposal plant consists of eighteen small sand beds which are well located and should easily take care of the sewage with proper attention.

Meriden

On request of Town Health Officer and by petition of adjoining property owners, made several inspections of nuisance from dust and odor coming from Wolfe Emery Wheel Factory. The Company agreed to install apparatus to prevent the dust and odors.

Middletown

On the initiative of the Department, inspected June, 1919, two Imhoff tanks used by the City. The Washington Street tank serves about 100 persons and has a capacity of about 2,000. It appeared to be operating satisfactorily. The Catherine Street tank serves about 50 persons and is large enough for 200. This tank was not operating as satisfactorily. The question of sewage

disposal in relation to the whole town should be investigated. The City Engineer was so advised.

New Haven

On the initiative of the Department, an inspection was made June 10, 1920, of a septic tank located on the ground of the New Haven Country Club. It was thought that the refuse from this cesspool seeped into a near-by brook on the watershed of the New Haven Water Company. An analysis of a sample of this water was made and the water was found to be free from contamination.

New Haven

On request, a conference was held June 16, 1920, with Mr. Johnson of the Bureau of Buildings at the Yale Armory, New Haven, regarding the sewage disposal system. The tile under-drains from the septic tank had become clogged, causing a leak in the lines and the sewage was overflowing into the street. A temporary plan was drawn by the Bureau which would take care of the sewage until such time as the city or town should provide sewage facilities.

Plainville

At request of Health Officer, investigated, November 29, 1918, pollution of Plainville Pond by several houses having direct sewer connections therein. The pond has been used for disposal of sewage for over twelve years. On date of inspection, the volume of the pond appeared to be sufficient to take care of a certain amount of sewage by dilution. However, to prevent further increase of pollution by other contemplated connections, recommended that all places discharging sewage into the pond install a small septic tank to hold back the settleable solids, permitting the effluent from the tank to discharge into the existing drains.

Plainville

On May 4, 1920, following an epidemic of typhoid at the Plainville Camp Grounds, the cause of which was attributed to the filthy condition of the toilets, an inspection was made, looking towards remedying the existing insanitary conditions. A site was selected for the location of the toilets, a suitable system of disposal recommended, drawings for the same submitted, and the toilets and system completed in accordance with them.

Plymouth

On complaint of Acting Health Officer, investigated insanitary conditions at Terryville, June 11, 1919. Conditions in general were found to be bad. To clean up the brook would give only

temporary relief. The real solution requires the installation of a sewerage system and a sewage treatment plant, and the authorities were so advised.

Portland

On the initiative of the Department, inspection was made October 15, 1919, of condition of work on Portland sewer extension, temporary permit for which had been granted. The work at this date was about 20% completed.

Rocky Hill

At the request of the Health Officer of Rocky Hill, an inspection was made April 7, 1920, of the sewage disposal system at the Rocky Hill High School. The school was equipped with flush toilets and septic tanks, and at times the ground around the tanks became so saturated that the effluent would back up into the basement of the school. It was recommended that tile underdrains be installed to take care of the effluent from the tank.

Rockville

On the initiative of the Department, inspected Rockville sewage disposal plant February 6, 1919. It is customary to clean the septic tanks once a year, but most of them had been badly neglected and were covered with several feet of scum. The slots in the effluent channel through which the sewage enters the tanks were clogged and it was entering through other slots cut at the water line, which prevented the deposition of material in these tanks and caused the scum to form. The beds are so clogged that they can only be operated as strainers and are even unsatisfactory for this purpose. The successful operation of the plant is seriously hampered by the character of the sewage that it is required to treat, which is mill wastes and ground water. The large amount of chemicals in the wastes is especially detrimental. The capacity of the sludge beds is insufficient.

Rockville

By request of School Committee, made an inspection of the toilet facilities in the Rockville City schools and the City Hall, May 22, 1919. The toilets in the schools, although in most cases adequate in capacity, were in a very insanitary condition, and badly lighted and ventilated. In the City Hall, the toilets were all equipped with disinfectors but were insanitary and badly ventilated. The School Board agreed to carry out the recommendations of the Department.

Shelton

On request of the Health Officer and Superintendent of the Huntington School at Shelton, following a diphtheria outbreak at the school, an inspection was made of the drainage conditions June 14, 1920. Water was seeping into the basement of the building through cracks in the walls, and there was a possible danger of drainage pollution from the outside toilets. It was recommended that the cracks be sealed with cement and the walls and floor be made waterproof; that tile lines be installed to intercept the seepage water; and that the outside toilets be replaced by inside ones.

Shelton

On complaint of Health Officer of odor from sewage emptying into Burying Ground Brook from houses of the Shelton Home Building Association, inspection was made July 22, 1919. The city sewerage system did not serve the property of this Association, and it has installed a private sewer system and septic tank, plans for which were approved by this Department. The effluent from the tank discharges into Burying Ground Brook. From here it flows to the Housatonic River and then through the heart of the town. Children bathe in the brook at several places. Investigation showed that the tank had not been constructed according to plans and that other suggestions of the Department had not been carried out. Recommended that the sewage effluent be disinfected by hypochlorite of lime to retard putrefaction and remove the pathogenic bacteria.

Simsbury

On request of Doctor Munson, Health Officer, in relation to toilet accommodations and drinking water in school accommodating between 200 and 225 pupils, advised that the Department did not approve of outside privies on account of heating and exposure of pupils in severe weather, and also the difficulty of cleaning them. Advised water flush toilets where sewers or disposal area were available.

Simsbury

On May 29, 1920, an inspection was made of overflowing cesspools on the property of Dr. Sullivan and T. Malonis in Tariffville. There was a small sewer installed a number of years ago by private parties who now control it. At present twelve houses are connected to this sewer. It was recommended that Dr. Sullivan obtain permission to connect to it if possible, otherwise, that he install water-tight cesspools; and that a water-tight vault be installed on the Malonis property.

Southington

At request of Borough Clerk, inspection was made of the sewerage disposal system at Southington, December 8, 1919. A report was submitted advising the Borough officials that the tank was not operating efficiently and asking for additional data in relation to the sewage flow. Recommended that the measurements of the scum and sludge in the septic tanks be made more frequently in order to obtain data on time of cleaning, and that samples of the effluent and sewage be submitted for analysis periodically. Contemplated changes in the coke filters were requested to be submitted to this Department for approval.

Stonington

On May 12, 1920, an inspection was made of a proposed sewer outfall at Stonington. This sewer was to take the sewage from about 25 houses and discharge it into Little Narragansett Bay. As a result of the inspection, the Borough officials were advised that under the statute no approval of plans for discharging raw sewage could be granted and they were requested to submit plans providing for some method of treating the sewage before discharge. Nothing further has been heard from them in relation to the matter.

Stratford

On complaint, inspection was made of condition of Bruce Brook, May 15, 1919. As a war emergency, a temporary permit was granted to discharge the sewage from Hollister Heights untreated into Bruce Brook for a period not to exceed six months. At the date of inspection, the time limit had about expired. The conditions were bad, and the town officials were requested to hasten the completion of the trunk line sewer which will take the sewage out of the brook.

Washington

On May 14, 1920, a reinspection was made of sanitary conditions at Lake Waramaug. Conditions were found to be greatly improved since the time of former inspection three years ago. Recommendations made at that time had been carried out and the wastes from all the hotels except one were being properly taken care of. The owner of this particular hotel was advised to relocate his privy farther away from the lake and install a septic tank to take care of the sink drains.

Watertown

On complaint of Mr. A. J. Campbell of the Connecticut Light and Power Company, investigated method of sewage disposal

at Watertown and condition of Steel Brook, January 31, 1919. The water above the dam at Oakville was very much discolored and had quite a perceptible odor due to factory wastes discharging into the brook. A plan for disposing of the sewage by sand filtration was proposed some time ago by the officials, but on account of lack of funds, the matter is still pending.

Watertown

On request of A. P. Hickcox, Chairman of the Town School Committee, inspection was made of the Baldwin School, July 5, 1919. Result of the inspection revealed that the present method of sewage disposal was insanitary and dangerous to the health of the children attending the school, and recommended that the town install either new privies, chemical toilets, or flush toilets with septic tanks and subirrigation.

West Hartford

May 12, 1920, at the request of the Hartford Tube Products Company, Elmwood, for information regarding a proper system for disposal of their domestic sewage, an inspection was made and a satisfactory method of disposal designed for the Company by this Department.

West Haven

On complaint, inspected insanitary conditions from overflowing cesspools on Arlington Street, Prospect Beach, March 25, 1919. The sewage from six houses discharged into one cesspool. The pipe which ran from it to the cesspool on shorefronts was broken and contents flowed out onto the street, and across the public bathing beach to the Sound. The sewer system for this district was expected to be finished in a few weeks. The property owners were advised to make connections as soon as permitted.

West Haven

On complaint of East Side Improvement Association, inspected pollution of Second Avenue Bathing Beach, July 23, 1919. There was a large accumulation of seaweed on the beach two feet in thickness in some places in an advanced state of decomposition. The beach at this point is frequented by unlicensed peddlers. The outlet sewer from the sewage treatment works on Blohm Street was not working properly and the effluent was being discharged into a creek which emptied onto the beach. The creek, which was badly polluted, was used for bathing by the children. The chlorinating apparatus at the sewage treatment works was out of order. The town had made an appropriation for repairs to the outlet sewer and work was then under way. Recommended

that the sewage disposal works be operated in an efficient manner; that the chlorinating apparatus be repaired; that the digging and sale of clams be prohibited; and that the seaweed be removed from the beach.

Wethersfield

On complaint of a family in Wethersfield an inspection was made March 30, 1920, of the Main Street sewer nuisance. The pipe had become clogged by sand which had entered through the joints and the water had backed up into the cellar of the complainant. On account of the wet condition of the ground, it was decided to postpone final recommendations until it had dried out sufficiently to permit of a reinspection.

Wilton

On complaint of Mrs. Schenk, investigated insanitary conditions of property at Wilton, October 18, 1918, where there had been several cases and one death from typhoid. In the rear of the premises, formerly occupied by deceased, was a pigsty and outside privy with exposed vault, both in poor condition. The water supply of most of the houses here is taken from shallow wells and is easily contaminated. Recommended that conditions in that portion of the towns of Winnepauk, Wilton, and Georgetown, bordering the Norwalk River, should be investigated.

APPROVAL OF BURIAL GROUNDS

The approval of additions to existing burial grounds is required by Section 6502 of the General Statutes before such addition can be used for burial purposes. The following approvals were granted:

Hamden

Application received for approval of burying ground site in the Town of Hamden for the use of the Warshover Relief Society. Approval granted September 8, 1919.

Mount Carmel

Application received for addition to Mount Carmel Burying Ground. Approval granted October 9, 1918.

New Haven

Application received for approval of annexation to the Adas Israel Cemetery in the City of New Haven. Approval granted May 10, 1919.

INSPECTION OF SWIMMING POOLS

The Bureau has recently undertaken the routine inspection of swimming pools located within the state. Twenty-five pools were inspected in the following places:

Bridgeport

Y. M. C. A.
Hotel Atlas

Greenwich

Y. M. C. A.

Hartford

South School District
Capitol Park
Y. M. C. A.
Y. W. C. A.

Middletown

Y. M. C. A.

New Britain

Y. M. C. A.
Y. W. C. A.
Sacred Heart School

New Haven

Yale University
Liberty Baths
Public Baths (City of N. H.)
V. J. Humphrey

South Manchester

Ninth District School

Stamford

Y. M. C. A.

Waterbury

Y. M. C. A.
Boys' Club
Dugan School
Crosby High
Wilby High
Clark School
Hopeville School

Winsted

Y. M. C. A.

A statistical summary of the preliminary inspection of these pools is as follows:

25 pools inspected.

24 indoor pools.

1 outdoor pool.

50 ft. is the average length.

22.5 is the average width.

3.75 is the average depth at shallow end.

7.33 ft. is the average depth at deep end.

84% is the uniform slope.

84% is the per cent. of tile-lined pools.

16% is the per cent. of concrete-lined pools.

16% obtain water from wells.

4% obtain water from a river.

80% obtain water from city supply.

44% pump water to pool.

56% is the gravity to pool.

Fresh water is added daily to all pools.

All pools are cleaned daily with brush and vacuum.

80% are equipped with recirculating pumps.

96% are equipped with centrifugal pumps.

76% are equipped with filters.

Average filter never cleaned.

80% use alum coagulant.

64% use disinfectant.
All require preliminary bath.
All require examination.
96% have regulations available.
44% operated for charity.

SPECIAL SURVEYS

Special surveys were made of summer camps, summer resorts and of school buildings, special reports of which will be appended.

INDUSTRIAL WASTES STUDIES

The work of this Bureau has been interlocked with that of the special work conducted under the direction of the Industrial Wastes Board. Complaints of pollution from any cause were primarily investigated by the engineers connected with the Bureau of Engineering, but if it was found that the complaint was the result of pollution by industrial wastes, it was referred to the Industrial Wastes Board for special consideration.

An exhaustive report of the research work conducted under this division is recorded in another part of this report.

RECOMMENDATIONS

Additional office space and an enlarged personnel are necessary to properly supervise water supplies and sewage disposal plants; and during the summer months, summer camps, boarding houses, and seaside resorts should be systematically inspected with proper follow-up.

There should be some definition as to the responsibility for the supervision of water supplies not municipally owned. At the present time both the Public Utilities Commission and the State Department of Health are charged with this responsibility.

Special studies should be made to determine the most practical method for waste disposal at small shore resorts where sewerage systems do not exist.

Every effort should be made to assist state institutions to secure safe and adequate water supplies and to dispose of their sewage properly.

A system should be inaugurated for the certification and routine inspection of private wells. This is an enormous task but when once accomplished it will guarantee safe water to all people in the state.

(Signed) J. FREDERICK JACKSON,

Director.

SANITARY SURVEY OF SHORE RESORTS

A preliminary sanitary survey was made of various shore resorts. The object of this study was to furnish the Department with information regarding the existing conditions affecting the health of the many people who visit or reside at the numerous summer resorts along the Connecticut shore.

The sanitary problems on which most attention was given include:

The public water supply.

Sewage disposal.

Collection and disposal of garbage.

Health hazard due to bathing in polluted waters.

Lack of sterilizing facilities for public bathing suits.

An adequate supply of pure water is the first essential of municipal or rural sanitation. Of the fifteen summer resorts that were visited, only one was without city water, this being Frost Point, at which place the condition was handled in an ideal manner,—each residence being provided with a driven well equipped with tank.

In municipal districts it is usually possible and always desirable to have the removal of excretal wastes by means of sewerage systems. As many of the shore resorts are actually on sea level, the customary practice has been to install cesspools. In many cases the installation of cesspools is even more desirable than would be a sewerage system without disposal plant, since the coastal water is used for bathing. Six of the fifteen places studied in this survey were provided with sewerage systems. In the other nine localities cesspools predominated.

Many cesspools are provided with an overflow pipe which leads to the Sound. This pipe is frequently buried in the sand and impossible for the investigator to locate,—even at low tide. If this overflow pipe has its outlet on the beach where bathing occurs, it constitutes a serious menace to health. During this survey the investigator frequently had to rely on the intelligence and honesty of the owner or occupant being interviewed, inasmuch as the cesspools and overflow pipes are completely covered by sand and often by the building itself.

Sewage in rivers and harbors constitutes a serious health hazard when bathing is permitted, as is the case in New Haven Harbor including Morris Cove. To quote Hugh V. Cummings, Surgeon in charge, U. S. Public Health Service,—“Bathing and swimming in the waters of the harbor, above the line between Old Tower and Bradley Point is unsafe and should be prohibited.” It is the opinion of Dr. C.-E. A. Winslow of Yale

University that an appreciable amount of the high typhoid fever death rate in New Haven is due to this cause.

The possibility of similar pollution in the Byram River at East Portchester and its effect on the bathers who frequent Byram Park should receive further study. The same is true of Hallowe'en Park at Shippan Point, and Black Rock near Fayerweather's Island. By the use of floats, and bacteriological analyses with various tide conditions, the seriousness of the situation could be determined.

In only one locality were many privies found. This was at Walnut Beach. If a system of grading the various resorts had been employed in this survey, it is the opinion of the investigator that Walnut Beach would have ranked lowest of all the places inspected. A very poor class of people have taken possession of the resort. Many back doors, with a litter of refuse and garbage, face the main street. The all-summer carnival has recently left this vicinity, leaving behind a mass of refuse. The population seems to be the worst element of New York City's Jewish people. At the time of this survey, the town was under the surveillance of New York detectives in connection with the Binkowitz murder.

The regular collection and disposal of garbage is essential for sanitary conditions. In nearly all the resorts this item seemed to be well managed. It must be remembered, however, that this report deals with conditions as found in September, a large portion of the summer population having left for the season. The annoying feature of many garbage cans, caused by lack of covers and exposure to flies, was found in some cases. When municipal garbage collection is possible, this work is often handled at a small cost by an individual who feeds the garbage to his stock. In order to avoid this expense, the housekeeper sometimes deposits the garbage and other refuse into the Sound when the tide and wind is thought to be favorable.

Of the six public bathing houses visited, only one had adequate facilities for washing and sterilizing the public bathing suits. Lighthouse Point Park has an admirable steam laundry with complete sterilizing equipment. Public opinion has condemned the common drinking cup and the common towel. Certainly some precautions should be taken to protect the bathers from skin and blood diseases common to the sporting element that makes use of the public bathing suits and bath towels that are furnished. It is suggested that during the next survey of this nature, layouts of city sewerage systems be obtained from the town officers and that these layouts shall constitute a portion of the report.

The remainder of this report will deal with the conditions found in each shore resort. The information has been collected

by observation, by inquiry from the owners and occupants of the property, and from the town or village officers in each locality.

Byram Park, East Portchester

About one-half mile east of Byram River, and on the Sound, is located the Byram Park. Until this year this was a quarry site, being now owned by the Town of Greenwich. The Park is equipped with a bathing house and the water of the Sound is used for this purpose.

Possible source of contamination comes from industrial wastes deposited in the Byram River near its mouth. There is also possible pollution due to the sewage which is emptied into the river.

The park occupies a territory of twenty acres, is very stony, and has one caretaker. There is no drinking water at the park. No other amusements than bathing are enjoyed at this beach.

Sound Beach

Sound Beach is in the Town of Greenwich about two miles southwest of Stamford. City water is obtained from Greenwich. It is hoped that a sewerage system will be installed within two years. Private sewers have been installed in many cases. There are no public amusements as the shore line is under private control. Garbage is collected regularly and the outside toilets are in good condition generally.

Shippan Point and Hallowe'en Park

Two miles southeast of Stamford Center is Shippan Point, a part of which is Hallowe'en Park. Shippan Point is a residential district with about 100 homes, having been developed by Frank Gurley Realty Company of Stamford. City water is obtained from the Stamford Water Company. The district is restricted, occupied by a good class of people, and no unsanitary features were noted excepting those that exist in Hallowe'en Park, which affords amusement in the form of free public bathing and a merry-go-round. This is within 300 feet of the outlet of the Stamford city sewers in Westcott Cove, and presents a very serious condition.

Roton Point

About two miles southwest of South Norwalk is Roton Point, an amusement park and residential district, provided with a supply of city water from South Norwalk. The residential portion contains about 25 homes; equipped with small cesspools. Garbage and refuse collection is regular and well handled.

The Roton Point Park is managed by Mr. Bailly. The assistant manager is Mr. Atcher who has been interviewed. Facilities for bathing and dancing and many other amusements are provided. The bathing suits are not sterilized, nor is there a supply of hot water for washing them.

The toilet facilities include about 40 seats provided with a single concrete vault which is automatically flushed every five minutes through an eight-inch pipe for a distance of about 1,500 feet to Five Mile River which empties into the Sound within one-half mile of the point where bathing is permitted. The possibility of pollution depends on the winds and tide, and would warrant further study.

Wilson Point is one mile east of Roton Point, and it is here that the Seal Ship Building Company is located. That portion of Wilson Point known as the knob has a bathing house and ice cream pavilion, but was not covered during this survey.

Frost Point, Green's Farms

From Green's Farms to Southport the shore line is owned by public-spirited people, and entirely restricted. There are no public amusements. The water supply is principally from driven wells and sewage disposal is to cesspools. No further investigation would be warranted here since conditions are all that could be expected.

Fairfield Beach

Joseph I. Flint is proprietor of the bath house and Smith and Tomlinson are proprietors of the restaurant and small bath house. Neither of these bath houses are equipped with sterilizing tubs or complete laundry equipment. The beach is sand and is evidently a very popular resort during the summer months. The water supply comes from Bridgeport. Sewage is conducted to cesspools. The nearest city sewer outlet is at the foot of Brewster Street, Black Rock, Bridgeport, which is about a mile and one-half distant.

Black Rock and Fayerweather Island

Black Rock is that portion of Bridgeport just east of Ash Creek. On the shore is located the Bridgeport Yacht Club, which is now used as a naval base. The Black Rock Shore and Country Club owns a club house in this district. Much of the shore line is owned by individuals who have built their own homes here. The city water is furnished by the Bridgeport Water Company. Garbage collection is handled by the Bridgeport officers. Much of the vicinity has a sewerage system and a new sewer is being laid which will lead to the present outlet. This

outlet is near Woodruff dock at the foot of Brewster Street and the sewage empties into the Sound without being treated. The danger with this practice is the fact that there is much bathing in this vicinity. The people of Fairfield have obtained an injunction prohibiting the proposed building of the additional sewer now in course of construction in the Black Rock vicinity, but it seems this has been overruled and the construction is going on as planned. The present sewer leads out to the Sound and is submerged except at low tide. It is understood that a sewage screening and disinfection plant is being installed at this outlet. Directly opposite this outlet and within a thousand feet, is Fayerweather's Island. On this island there are 15 cottages and about 30 tents. The possible pollution of the waters used for bathing should receive further investigation.

Laurel Beach

Laurel Beach in Milford is the result of an association's efforts to sell land only to high-class, public-spirited people. The vicinity is supplied with city water from Milford Water Company and the association maintains its own sewerage system which empties into the Sound.

Walnut Beach

To the east of Laurel Beach and adjoining it is Walnut Beach. No provision is made for systematic sewage disposal or garbage removal, although the latter is handled to some extent by individuals who feed the garbage to stock. The population is mostly Jewish, and a low grade of people. Cesspools predominate, although there are many privies in the district. The all-summer carnival has recently left the beach,—leaving a mass of refuse behind. Many of the houses have their back doors on the street, and the array of garbage pails and refuse attracts the attention of people passing in automobiles and trolley cars. Presence of garbage and refuse in the waters of the Sound leads the investigator to assume that many people use this means of disposal. Water is obtained from the Milford Water Company.

Of the restaurants visited, the one in worst condition was the Oak Grove Hotel. Although it was not a busy day, garbage had collected in sufficient quantities to attract many flies which had free access to the pails. Screens on doors and windows were in serious need of repair. The conditions at Walnut Beach were the worst that came to the attention of the investigator during the survey.

Myrtle Beach

Just east of Walnut Beach is Myrtle Beach. There are no amusements here except bathing. No general system of sewage

disposal is provided,—cesspools and privies being in use. Water is supplied by the Milford Water Company. Garbage collection is regular and adequate.

Morningside

Three miles east of Milford, and on the shore, is Morningside,—a restricted residence section managed by the Yale Land Company of Milford of which Mr. Robins is Secretary. Water is supplied by the Milford Water Company. At present about forty houses have been built. A sewerage system with two septic tanks has been installed by A. B. Hill, consulting engineer of New Haven. The clear water from these tanks overflows through a pipe into the Sound. The association maintains a club house in order to avoid having a public hotel on the grounds.

During this study of fifteen shore districts, Morningside presents the most appealing advantages.

Lighthouse Point

Occupying eighty acres on the east shore of the New Haven Harbor and on the Sound over to Morris Creek, is Lighthouse Point Park, owned by the East Shore Amusement Company of New Haven. During the survey, the investigator met Mr. Tom Shanley of New York who is the chief stockholder. Mr. Shanley and his assistant, Mr. McGovern, are both public-spirited men and interested in sanitation. The park is the largest amusement center that was visited during this survey. On many Sundays there are as many as 5,000 bathers during the day. There are ten restaurants and lunch stands which are rented on concession. These were all closed on the date of this survey.

Within the park there are two automatically flushed toilets leading to the New Haven Harbor. In the bathing pavilion are 17 flush toilets and six shower baths which flow into four cesspools which have overflow pipes from which the clear water flows into Morris Creek, nearby.

The beach is sandy and seems to be without contamination, due to favorable tides, currents and winds. Bathing is exceptionally safe here,—only one life was lost in twenty years. City water is obtained from the New Haven Water Company.

Considering all the resorts visited during the survey, Lighthouse Point has the only bathing pavilion which is provided with steam laundry and sterilizing equipment.

Swift's Momauguin and Cosey Beach

East of Lighthouse Point, in the town of East Haven, is located Cosey Beach with about 300 frame cottages and four restaurants, the largest of which is Swift's Momauguin Hotel.

The district is provided with New Haven City water. There is no sewerage system, although many of the houses and restaurants are equipped with flush toilets connected to cesspools. Garbage is collected daily by nearby farmers.

Swift's hotel is equipped with two large cesspools which are necessarily cleaned out once each season. The kitchen is not screened. The basement under the kitchen is used for storage of food supplies. Six garbage pails were found without lids in this hotel. The kitchen conditions will bear further investigation during a busy season.

The bathing beach is sand and well removed from any sewage outfall.

Mansfield Grove

Just east of Momauguin and across a small stream is Mansfield Grove,—a colony of twelve frame cottages, a few tents and two restaurants. This is very rocky land. It is provided with New Haven City Water. In one of the restaurants here, Bartlett's restaurant, the investigator found a quantity of small dead fish in a container without a cover. They were attracting a vast number of flies and mosquitoes. When Mr. Bartlett's attention was called to this matter, he saw nothing wrong in such condition. This restaurant was already closed for the season, and it would be advisable to give it a thorough investigation next year during the busy season.

Double Beach

Mr. Noble is proprietor of the Double Beach House, the bathing house, a small restaurant and an ice cream parlor. Milk is obtained in Branford from Mr. Prann, the grocer. Water comes from the Branford Water Company. The hotel is provided with sanitary flush toilets which lead to a double cesspool with an outlet to the Sound. This cesspool is located under the bath house.

Garbage is collected by farmers, but is sometimes dumped into the Sound.

In the ice cream pavilion there is running water but no facilities for heating the water. Ordinary glasses and dishes are used instead of the sanitary ones that should be adopted under such conditions. Mr. Noble agreed to install a hot water tank in this building.

Colored help is employed in the hotel, and the kitchen presented an unsanitary condition,—with garbage pails without covers, and insufficient screens to prevent access of flies. There are no dwellings in the immediate vicinity, although the hotel provides accommodations for the public. As this beach is almost isolated, it probably receives little attention from local health officers, and should certainly be visited by members of this department during the next season.

Paucatuck

Inspection was made August 24 at Paucatuck and Westerly. The condition of the river, as shown from a visual observation, was not very bad. The principal sources of pollution on the Paucatuck side are the Paucatuck Shirt Company, the Lorraine Company, the Cottrell Printing Press Mfgs., and the American Thread Company. At this time, Saturday afternoon, the plants were not open to inspection, and details of employees and sanitary fixtures are not included herewith.

On the Westerly side are the Westerly Textile Company, and at Ashaway, the Ashaway Woolen Mills and the Ashaway Line and Twine Company, also the Paucatuck Woolen Mills at Potters Hill.

Stonington Borough

The Borough of Stonington is about 75% sewerred. The proportion of public and private sewers could only be determined by an intensive survey of the borough, but the main public sewers and private outfalls are shown upon maps on file in this office. There is a low section near Elm Street which is only about two feet above tide-water, which hitherto has prevented any attempts to sewer this section. The principal factories contributing wastes to the sewers are the American Velvet Company, Atwood Machine Company and the Ship Construction and Trading Company. From the Atwood Machine Company, the only wastes which would be detrimental are those of the domestic variety, discharging through a private sewer directly into the water.

The American Velvet Works employed at the date of inspection, August 20, about 286, of which 86 were women. The number of toilets and urinals in the factory is 23, the general sanitary condition of which was fair. About the only industrial waste discharged from this sewer is the soapy waters used in sizing the silk. They have a private eight-inch sewer laid down Bayview Avenue underneath the N. Y., N. H. and H. R. R. Company's tracks to the marsh, and across the marsh, discharging into the water at a depth of about six feet.

In addition to the toilets at the factory, there are about seven houses on Bayview Avenue and eight on Summer Street which are connected with this sewer.

The Ship Construction and Trading Company is a new Corporation, employing about 800 men. They, at present, have the yard divided into three parts; the central portion, where two ships are being constructed, is under government control. The southerly portion is not under government control, but the same sanitary precautions are taken here and in the northern portion where repair work is done, as are taken in the government-controlled central portion. At this plant, the water for washing, etc.,

is obtained from the Mystic Valley Water Company, and drinking water from the well on the property of M. A. Pendleton, about three blocks from the shipyard. This well is well housed, provided with a granite curb, and is situated about 25 feet from, and on higher ground than a privy located on the property. The Company maintains a small first-aid hospital where emergency treatment is given the men. Water flushed toilets discharging into water-tight cesspools are installed in the office buildings, and five latrines situated on the waterfront are for the use of the yard employees. It is the intention of the Corporation to abandon these and to substitute water flushed toilets discharging into water-tight cesspools. Running back from the street into the yard are two pieces of property not controlled by the Corporation, where outside privies are located. These are very near the ways where the new ships are building. Proceedings for condemnation of these properties are now under way, and when completed, the privies will be torn down. A plan of the yards, buildings, etc., is on file in this office.

North Stonington

The principal industry in North Stonington is dairying. Most of the milk goes to a Providence Company which analyzes it, and supervises its production. Most of the larger farms are provided with mechanical milkers. Gallup and Assenhoop Brooks unite in the village to form the Shunock River. Gallup Brook, which flows directly through the town, formerly had several outside privies located on its banks. Some years ago, when Westerly took its water from the Shunock River at White Rivers, they caused the use of these privies to be discontinued, but since they have discontinued taking their water from the Shunock River, there is reason to believe that the outside toilets are used sometimes. The water supply in the village is mostly from wells. A large spring situated on the Park property supplies the Wheeler School which has water flushed toilets. Outside privies at district schools are in poor condition.

Wampoosic Point

Wampoosic Point is a settlement of about five cottages all supplied with running water from a well 118 feet deep, discharging about 28 gallons per minute, and installed about six years ago. Most of the cottages are provided with inside water flushed toilets and water-tight cesspools. Most of the garbage is collected and fed to chickens, and what remains is gathered up and cast into the water. The water has been analyzed by firms at Pittsfield and Hartford.

Lords Point

The settlement at Lords Point consists of about a hundred cottages, cheap type of construction. They receive their water from a reservoir situated upon Lords Hill on the property of James E. Lord. This reservoir is fed by a spring and a ditch which crosses the main highway to Stonington and flows through the property of Judge Collins, and rises in the swamp north of the State highway. There is also a driven well at the Point which is used as an auxiliary supply. At the date of this inspection, there was practically no water in the reservoir, the ditch was dry, and the overflow from the spring was very small. A gasoline motor had been installed at the driven well at the Point, but the amount of water raised was not sufficient to meet the needs of the residents, and from continued pumping, had begun to develop a brackish taste. The people at the Point pay a water rental of \$6.00 per year. Conditions during the past month have been quite critical. It has been necessary to convey salt water in pails to the bath tubs in the hotel at the Point, in order to provide for flushing the toilets. The wastes from the cottages at the Point and from the hotel are discharged either directly into the water or outside privies are provided with shallow pits which are cleaned out at the end of the season. Conditions about the hotel were particularly bad, garbage having been allowed to accumulate in the rear of the kitchen, and an outside toilet, unprotected, being within fifteen feet of the kitchen. By direction of the Commissioner of Health, the proprietor was given 24 hours to remedy these conditions, which he did, and the appearance of the premises at the end of that time was considerably improved. All garbage was formerly thrown into the water, but, I understand, it is now collected and buried on adjacent land. Mr. James E. Lord owned the property and sold off the lots. He controls the water supply and has promised to take some steps toward increasing it so that in case of drought people at the Point would not be entirely without water.

Mystic

Mystic is situated on both sides of the Mystic River, partly in the Town of Stonington and partly in the Town of Groton. Jurisdiction is divided between the Health Officer of Mystic and Stonington and the Health Officer of Groton Town. The general level of the land on the east side of the river is only about three feet above tidewater, which makes the problem of drainage somewhat complicated. There is one sewer through Main Street, running from the river to Odd Fellows Hall. Most of the houses on Main Street within this district are connected with this sewer. A ditch running from the rear of the Congregational Church takes the drainage from the church directly to the river, and several pieces of property bordering on it are connected with it.

On the westerly side of the river, in the Town of Groton, most of the houses discharge directly into the river. The drain from the large school on the hill, which accommodates about three hundred pupils, crosses three pieces of property which, for the privilege of crossing, are permitted to connect with it. From the river bank, it extends out in a wooden box to the edge of the channel. It was intended that the outer end was to be weighted or anchored to keep it in position on the channel bottom, but for some reason, the outer end now has broken away from its anchorages and, rising and falling with the tide, has interrupted the flow of sewage and caused it to boil out at points intermediate between the shore and channel. This matter has been taken up with the School Committee and Health Officer of the Town by Miss Cornelia J. Davis, one of the property owners connected with this sewer and affected particularly by the odors arising from the premature discharge near shore, without accomplishing very much toward remedying the insanitary condition, despite the fact that in her agreement with the School Committee permitting them to cross her land, it is specifically stated that discharges from the sewer should be carried out to the channel. Two places on Gravel Street, one belonging to Miss Kariska Gates and the other to Doctor Purdy, former Health Officer, discharge their sewage at the bulkhead line in very shallow water. On this side of the river there is located a girls' camp, called Camp Mystic, which will accommodate about seventy-five. It is under the direction of Mrs. Mary Jobe of New York City, and has a woman doctor in attendance. Doctor Congdon, the Health Officer, states that there are four or five cases of typhoid each year on the east side of the river and ten or twelve on the west side. He attributes the difference largely to the condition of the wells on the west side of the river.

The Pendleton Company, Superintendent, Mr. Frazier, maintain a shipyard, employing from 70 to 80 men. They receive their water supply from the Mystic Valley Water Company, and a single pipe is just outside the blacksmith's shop, providing the men with water for drinking purposes. They have two ships on the ways, nearly completed.

The Connecticut Shipping Corporation, whose property adjoins the above, employ, at present, 40 to 50 men, but expect to expand very greatly in the near future. At present, they are doing mostly repair work, but they expect to have contracts for new work very soon. The man in charge is Captain M. L. Gilbert. Both of these yards have privies on the dock fronts, adjoining each other, and open to the tide.

The Rossie Velvet Company, Superintendent, Mr. Flynn, employ about 280. They obtain their water for washing from the Mystic Valley Water Company, and for drinking purposes

from a driven well in the rear of the factory. There are 27 toilets and 1 trough urinal in the plant, all in fair condition, and the plant is equipped throughout with bubblers. Sewage is discharged across the street at the north end of the dock belonging to the Company. The principal industrial wastes are the spent aniline dyes from eight tubs, 9 ft. x 29 ins. x 26 ins., discharging twice a day, and four soap and oil vats 7 ft. in diameter by 4 ft. deep, also a sulphur black vat, 5 ft. x 5 ft. x 4 ft. 6 ins., discharging twice a day. General sanitary conditions at this plant seem to be good. The Company has recently erected a plant at Noank, employing about 20 girls. They transport their drinking water from their well to this plant daily.

The Mystic Manufacturing Company, Mr. James Cook, Secretary, employ about 160 hands, of which one-third are women. The works are now under government control and were running nights up to last week. The process of manufacture is weaving and finishing, and practically the only industrial wastes are about 300 gallons of soapy water a day. A 6-inch sewer discharges about 150 feet down stream from the plant, and there are about 16 toilets and 1 urinal. Many of the toilets are of the old-fashioned cast-iron hopper type which are very unsightly in appearance, but which the Superintendent informed me are cleaned thoroughly every day. They are installed in preference to the porcelain type because of frequent stoppages due to carelessness in use by the employees, particularly the women.

Packers Tar Soap Company, is located on the main highway, east of the railroad station. They discharge their wastes which are small in amount, into the creek in the rear.

Wilcox Fertilizer Company, located on a point about a quarter of a mile out and west of Quiambog Cove. The odor from this place is quite noticeable at times. Their wastes go into the Sound.

Cottrell Manufacturing Company, manufactures ready built buildings, wastes immaterial in amount.

Marine Railway Company repairs gasoline engines, situated on the waterfront, wastes small in amount.

Old Mystic

The Mystic Woolen Company employs about 90 hands, 50% being women. The plant is equipped with five water flushed toilets and one urinal. Drinking water is obtained from two driven wells on the property on the north side of the roadway across from the factory. Two outside privies about forty feet from one of these wells, are in extremely bad condition. The principal industrial wastes are from four dye vats, 7 ft. x 7 ft. x 4 ft. 6 ins., emptied every day, and from the soap and alkali tubs. The combings are collected each day, baled and sold. The Company

gets its water for boilers and industrial processes from the river, a considerable distance above the plant, conveying it to the plant in a pipe line.

The condition of the river above the bridge on the road to Burnetts Corners was very bad. Garbage and refuse of all kinds was floating on the water. The ice pond belonging to Ernest W. Brown, on the other side of the river, is menaced by the washings from a livery stable and outside toilets, situated on the steep slope directly adjoining a brook that feeds the pond. At Burnetts Corners, the property of Edward Stapling on the same brook, has an outside privy directly over it. This house has a well inside which might very probably show signs of contamination. On the Cheseborough place across the road, there is an outside privy situated on the gully and draining into the brook. The house next above on the hill has a barn and privy which do not drain directly.

West Mystic and Willow Point

The one, an all year round settlement, the other, a summer resort, merge into each other, receive their water supply from the Mystic Valley Water Company, and discharge their wastes either directly into the Sound or use outside privies. The Wood-McClure Company, boat builders, are located at Willow Point.

Noank

The principal occupation of the population is fishing, and, up to a few years ago, shipbuilding, in what was then known as the Palmer Shipyard. This yard was closed for some years, but within the past eighteen months, was bought by Charles Morse, reorganized and is now known as the Noank Branch of the Groton Iron Works. They employ about 1,000 hands and have five ships in various stages of construction at present on the ways. The water for power and for boilers is taken from the Brook Street Brook, and the drinking water entirely from the Palmer well in the village. Efforts were made to obtain water from the Mystic Valley Water Company by extending pipes about a mile and a quarter, but they were not successful. The offices are provided with water flushed toilets, and the employees in the yard use five latrines situated on the waterfront. At the date of this inspection, the condition of one of these latrines marked "A" on the plan of the yard, which is on file in this office, was very poor, and Mr. Thornton, the Welfare Deputy, agreed to have it remedied at once. Bubblers are installed throughout the yard, and the plant has been inspected by Mr. Newman of the U. S. Shipping Board, and recommendations made by him have been carried out. Mr. McCabe, the general

manager of the plant, stated that to carry the water supply from the present terminus of the distribution system of the Mystic Valley Water Company to the yards, under present-day conditions and prices, would cost about \$25,000.00, that the yard was a lump sum contract yard, and that they had, at the suggestion of the shipping Board and with the expectation that they would be reimbursed for the extra expenditure occasioned by it, installed a fire protection system, and had never been reimbursed. He was, therefore, somewhat touchy and quite positive that any further extraordinary expenditure to improve the sanitary condition of the yard would not receive his approval. The Company has taken over an old hotel in the village and remodeled it for the use of their men. They have also erected a number of shacks along the railroad right-of-way west of Spicer Avenue, which have not improved the sanitary conditions in that locality. It is rumored that the village was to be made the headquarters of all Coast Guards, totaling about 96 men, but they had not been placed there at the time this inspection was made. The general feeling throughout Noank amongst the older inhabitants is antagonistic to this Corporation, and they have difficulty in getting board or rooms for their employees.

Most of the houses in the village receive their water supply from cisterns and use outside privies. Any attempt to bring water to the settlement has not received very much encouragement and no offer of financial coöperation on the part of the residents.

Groton Long Point

Groton Long Point is a settlement of about 104 cottages and receives its water supply from two dug and one Artesian 150-foot well. The method of disposal of wastes is inside toilets and outside privies. There are a few of the houses discharging directly into the Sound, although this is specifically prohibited in the deeds of the property. Privies are cleaned out and garbage collected once a week and carted off to the woods adjoining and buried or burned.

SHORE RESORTS—RE-INSPECTIONS

Following the preliminary survey of shore resorts, reinspections and inspections on complaint have been made from time to time. The following shore resorts were inspected in 1920, prior to July first:

Branford, Double Beach
East Haven, Mansfield Grove
East Haven, Cosey Beach
Fairfield, Fairfield Beach
Lyme, Niantic Beach
Lyme, Crescent Beach
Milford, Silver Beach

Milford, Walnut Beach
Milford, Laurel Beach
Milford, Myrtle Beach
New Haven, Lighthouse Point
New London, Ocean Beach
Stonington, Lords Point
Westbrook, Grove Beach

SUMMER CAMP SURVEY

An investigation of the summer camps and shore resorts was begun July 20 and completed September 15, 1919.

During the camp survey, every county in the state was visited, and 57 summer camps were studied in detail. The camps were generally somewhat removed from main thoroughfares and were frequently not under the immediate supervision of local health officers,—thus demanding the attention of the State Department of Health. The importance of the problem is best revealed by the fact that the survey included a detailed study of living conditions in camps with a total sleeping capacity of over 5,000 people, but as the average camper remains only two weeks, the turnover is high, and the total number affected must be over 25,000.

Objects of the Survey

The objects of the survey were to ascertain the general sanitary conditions with special reference to public health hazards; to make permanent record of the findings in order to assist in the prevention and control of epidemics; to make suggestions that would improve the conditions; to order the removal of health hazards when they are present; and to require the installation of sanitary equipment when necessary.

In order to describe the work covered in this survey, and to assist in subsequent investigations, the following report has been prepared:

Sources of Information

As this is the first investigation of summer camps that has been made by this department, it was first necessary to obtain a list of camps and their locations. Railway guides published by the U. S. Railroad Administration furnish the locations of many of the high class camps that are open to the public. New York papers, especially the morning edition of the *World*, assist in the location of the cheaper camps and Jewish boarding houses, as they use the advertising columns for publicity. Y. M. C. A. camps are located through the local associations and through the office of the State Secretary, Mr. J. B. Thwing, 177 Church Street, New Haven. Boy Scout camps are located through the Scout Executives in the larger cities. The New York Federation of Fresh Air Camps furnishes a booklet with locations of camps maintained for mothers and children. It should be noted that an important source of information is at the camps being visited, for they frequently encounter other camps. When obtaining information about a new camp, the investigator will do well to secure as much data as possible, for they are frequently

difficult to locate. This information should include the duration of the camping season.

In the present investigation, the owners or proprietors of the camps were not informed until the inspector was on the ground, and they did not have the advantage of a clean-up week.

Scope of the Survey

A total of 57 camps were visited which are classified in 6 groups, as follows:

Camps Operated for Profit:

Camp Berkshire, West Goshen	Camp Winoko, Lakeville
Camp Carter, Kent	Camp Wonposet, Bantam Lake
Camp Milford, Kent	Camp Wopowog, Leesville
Camp Ponemah, Kent	Hooker's Camp, Guilford
Camp Crailo, Danbury	Mt. Tom Camp, East Haddam
Camp Mystic, Mystic	

Camps and Summer Houses Operated Not For Profit:

Branford Fresh Air Cottage, Bran-	East Side House Farm, Stepney
ford	Elton Camp, Chester
Camp Bleeker, Milford	Farmington Lodge, Farmington
Schermerhorn Home, Milford	Keemosalabee Camp, Chester
Camp Columbia, Bantam Lake	Life's Fresh Air Farm, Branchville
Camp Crumbie, Kent	Sepunkum Camp, Bantam
Camp Wilson, Kent	Spring Farm, Greens Farms
Camp Harlem, Lakeville	Terramuggus (Island) Camp, East
Camp Pioneer, Moodus	Hampton
Camp Terramuggus, Lake Terra-	Vacation House, Short Beach
muggus	Wangum Lodge, Rocky Hill
Community Boys' Camp, Shelton	

Camp Meeting Grounds:

Connecticut Advents' Camp Grounds, Southington
 Plainville Camp Meeting Grounds, Forestville
 Pine Grove, Canaan
 Willimantic Camp Meeting Grounds, Willimantic

Jewish Boarding Houses:

Axelrod Farm, Moodus	Elgard Farm, Colchester
Bulkin Farm, Colchester	Echo Farm (Ward's), Moodus
Denber Farm, Colchester	Goldberg Farm, Stepney
Erschader Farm, Colchester	Schwartz Farm, Stepney
Grief Farm, Colchester	Zavordnick Farm, Moodus
Harowitz Farm, Colchester	Ginsberg Summer House, Moodus
Norwich Farm, Colchester	Greenberg Farm, Moodus

Permanent Hotels and Amusement Parks:

Mount Algo Inn, Kent	Lake Compounce, Bristol
Algonquin, Kent	Lakeview House, East Hampton
Grandview House, Moodus	Sunrise Hotel, Botsford

Industrial Camps:

Chase Metal Works, Waterbury
Scovill Mfg. Co., Waterbury
N. Y., N. H. & H. R. R. Construction Camps

Securing the Information

Upon arrival at the camp, the inspector obtained the desired information by observation and by interviewing the proprietor and occupants of the camp. When convenient, the inspector got in communication with the local health officer, who often gave valuable information, and in a few cases, furnished leads regarding sickness and epidemics that had occurred in the camps. The proprietors would hesitate to give such information.

The chief items covered include the water supply, the conditions in the kitchen, the washing facilities, sleeping quarters, garbage disposal, toilet facilities and sewage disposal. In order that no important items would be overlooked, and to afford uniformity of reports, a "Memorandum for Inspection" was devised. It has eighty questions, and a copy of the memorandum forms a part of this report.

When a subsequent inspection is made, it will be well to consider the following camps which were not visited during this survey:

Playridge Cottage, Woodmont—open all season.

Center Church Camp (Hartford), for girls, Columbia Lake.

Camp Eastford, L. Stanley Kelley, Director, mail address, Eastford, season, June 28 to Aug. 30, 1919, capacity, 50 boys. Directions: Take pike from Willimantic to Putnam and Providence. At Phoenixville, turn on dirt road, bearing left to Eastford village, three miles. Pass one store at village bearing right at the school house. Climb the hill and follow straight road to next right sign, "Camp Eastford." Follow road to right.

Camp Trois, Y. M. C. A. Camp at Saybrook.

Camp Tuxes, Roger Lake, Old Lyme, for boys, public.

Sebowisha Camp, Norwich, for girls, public, Mrs. Lewis J. Phillips, Director.

Camp Cadaho, for boys, write to Mr. Milo Light, West Chester, Pa., for location and details.

Twin Lake Camp, for girls, 8 miles from Mystic, Mrs. McClay, Director.

Camp Massapeack, Y. M. C. A., New York boys, Gardners Lake.

Results of the Investigation

The results of the survey are shown on the original inspection sheets which are on file in this office. Advertising matter has been collected and in some cases, is attached to the reports. Misrepresentation of facts occurs in only one case, Camp Wopowog, which misquotes rates and the number of people that must sleep in one room.

Photographs of insanitary equipment and surroundings are attached to numerous reports, especially the Jewish boarding houses. Considerable difficulty was encountered in obtaining representative photographs, due to incessant rainfall which hampered the investigator throughout the summer.

As each class of camps presents different problems, the insanitary conditions peculiar to each type will here be briefly reviewed.

Camps Operated for Profit

Eleven camps were visited, which can be discussed under this head. They have been named and located on a previous page of this report. The camps have an average population of 100 people at any one time, the largest being Camp Wopowog with over 400 people. The rates that are charged average \$25.00 per week, the highest being \$300.00 for a season of eight weeks, this being the case at Camp Mystic. Water is generally obtained from driven wells, one camp being provided with city water, but four getting their drinking water from springs. Little can be told by casual examination of a well, but in three cases contamination seemed possible. These are Camp Wopowog, Camp Carter, and Camp Winoko. The kitchens in each camp were visited, and with two exceptions, all were provided with water tanks for heating water. In four places the garbage pails were without lids, and in five cases screens in windows and doors were lacking or in serious need of repair. The general condition of utensils, tables and floors in the kitchen was usually good.

Hooker's camp is unique in having no floors in the kitchen or dining room. Sand from the shore is used instead of a floor. According to their statements, they sweep-out—or more correctly, shovel out once a week, and this camp charges \$300.00 per season! Garbage is fed to the stock or collected by nearby farmers.

At Camp Wopowog with its 400 people, the kitchen is in the basement, and this has a concrete floor with a drain, but the floor is covered with ashes, dirt and refuse, and has not been cleaned in weeks!

The sleeping quarters are in cottages or tents, in two camps these tents are not provided with floors. Cots or single beds are provided in all cases. Bathing is generally done in nearby rivers and lakes.

Sewage disposal forms the most serious general difficulty, due to absence of running water. Of the eleven camps conducted for profit, only five are equipped with flush toilets, the others using closets with vaults or removable bottoms. The flush toilets lead to cesspools which are air-tight in all cases.

Camps Operated Not for Profit

Twenty camps can here be discussed that are operated by

Y. M. C. A., Boy Scout, and charity organizations. The capacities of these camps vary from 20 to 200 people. Usually there is no expense, but in some cases cost of operation is partially paid by the camper; in no case is it in excess of eight dollars per week.

Water is supplied by city water companies in only three cases. The usual source is from a driven well. In three cases water is obtained from dug wells,—Camp Terramuggus, Sepunkum Camp, and Life's Fresh Air Farm. In the latter case, water is obtained from a brook when the supply from the two dug wells is insufficient. As Life's Fresh Air Farm is a permanent institution, it is recommended that these sources of water supply receive further investigation.

Only five of the twenty camps are provided with bath tubs or showers. Lakes, streams, and in a few cases, the shore is used for bathing.

The kitchens in these camps were generally found in good condition and lack of screens seem to be the most serious objection.

Camp Meeting Grounds

Four camp meeting grounds, housing 1,250 people, were studied. On Sundays during the meetings, thousands of people visit the camps and carry their lunches or eat at the boarding houses which are operated by the associations that control the grounds. The usual type of dwelling is the summer cottage.

The Plainville Camp Grounds obtains its water from the Bristol Water Company and also from a spring which is sheltered and well protected.

The Connecticut Advents' Camp obtains its water from two driven wells with concrete shelters. Pine Grove's water supply comes from a spring which is well removed from any apparent contamination.

The water at the Willimantic camp grounds comes from eight dug wells located on the grounds.

The nearest cesspool to any one of the wells is 600 feet distant, and in this case, the drainage is favorable. All these wells are provided with covers and curbs.

A uniform type of latrine is found in the four camps. It is well raised from the ground and there is no vault. It has an exposed back,—absence of screens constitutes the chief disadvantage. Photographs of these toilets appear in the inspection memoranda of the Plainville and Advents. In the case of the Plainville Camp, the toilets are cleaned and contents removed daily, while at the Advents' Camp, this is done once each year. Many of the cottages at the Plainville Camp Grounds had been equipped with small individual cesspools for the kitchen water. Some of these cottages have since installed flush toilets which have been connected to the small cesspools. In a few cases, the

cesspools have overflowed. The subject of sanitation in the Plainville Camp Grounds received considerable study as a result of the recent epidemic of typhoid fever. Except at Plainville, the camp meeting grounds are without bath tubs and showers due to insufficient water supply. Garbage is removed daily by farmers in three of the camps, while at the Advents' Camp, it is buried under one foot of soil once each week. Printed by-laws and sanitary regulations are posted in conspicuous places at each of the camps.

Jewish Boarding Houses

In three localities of the State, namely, Moodus, Colchester, and Stepney, there are numerous summer boarding houses conducted chiefly for Jewish people of New York. Fourteen houses of this class were included in this survey. The quarters usually consist of one or two large frame houses in which live from 20 to 50 people. Over 125 people are fed at the Greenberg house.

In ten cases, water is obtained from dug wells and frequently the supply is not far removed from closets and cesspools. At Schwartz's Farm the well is under the kitchen floor which is of wood. Directly above the well is a clean-out hole equipped with a wooden cover. As quite a few people use this kitchen for laundry work, the floor is water soaked and dirty, and the cracks permit this foreign matter to fall down in the well. At the Harowitz Farm the dug well is within 30 feet of a cesspool. A photograph of this well is attached to the Harowitz report and shows four laundry tubs in the position where the family washing for the thirty boarders is usually performed. The dirty water is thrown on the ground near the well, which is used for drinking purposes. At Goldberg's Farm may be found a dug well at the lower end of a field used for pasture. The dug well is without cover. A photograph of this well appears in the Goldberg report and shows a family wash in progress nearby. At Denber's Farm the dug well is within 30 feet of the cesspool and 50 feet of the barn. The dug well of the Axelrod Farm is within 40 feet of the outside closet and near the point where dishwater is thrown.

The kitchens in the Jewish boarding houses are all without tanks for heating water. In many cases, utensils, tables, and floors were in dirty condition. Garbage is usually fed to the stock, but is not removed frequently enough. Photographs of the Greenberg Farm show the back yard,—many cans filled with garbage but without lids. Much of this garbage is dumped within 200 feet from the kitchen. In many cases screens are absent or need repair.

With two exceptions, all the Jewish houses have latrines, and many of these need attention. Photographs of these are included in the reports on the Harowitz, Grief, Greenberg, and Denber houses.

For kitchen waste-water, some of the houses have tile drains or cesspools, but the usual method is to throw the wash water out the kitchen door, whether it be near the well or not.

Washing facilities consist of a pitcher of water and a bowl usually placed in the sleeping rooms. There are no bath tubs or showers in any of the houses. The summer boarders in the Moodus vicinity usually "bathe" in a mud hole of a dirty stream a half mile east of Greenberg's Farm.

Of all the summer camps visited, the Jewish houses presented the most serious problems, and such is unnecessary since they are all permanently established.

Permanent Hotels and Amusements Parks

One amusement park and five summer hotels were visited.

The Algonquin uses spring water which apparently is in good condition. The waste water pipes and flush toilets are connected to a cesspool. The only suggestion was to provide metal garbage pails with covers.

The Sunrise Hotel is a Jewish hotel which has a capacity of 85 people. The general maintenance is poor and appearance is bad. The kitchen is full of flies and the screens need repair. Water is obtained from two driven wells. Two flush toilets are connected to a cesspool.

Mt. Algo Inn is supplied with city water and flush toilets, and is in very good condition.

Lakeview House is provided with two latrines and two flush toilets which lead to the cesspool. The cesspool was without cover and at the time of this inspection was overflowing 40 feet from kitchen and 30 feet from the well in the basement. The public throughout East Hampton resent the insanitary conditions surrounding this hotel.

Lake Compounce, a picnic ground and amusement park near Southington, was visited during the survey. One flush toilet is on second floor over kitchen. A few latrines are scattered over the grounds. The park was practically closed for the season, and conditions were generally good.

The Grandview House is a frame, two-story, eighteen-room house, conducted chiefly for New York Jewish visitors. Photographs in the original memorandum show the muddy condition near the kitchen,—much of this dirt is tracked into the kitchen. Insufficient shelving compels the waiters to pile the dishes on the floor of the kitchen. Cooking utensils were in an insanitary conditions and dishes were dirty. Garbage and tin cans are thrown to chickens 150 feet from kitchen, and this attracts many flies. The insanitary conditions are shown in photographs attached to original memorandum.

Industrial Camps

The Chase Metal Works maintains a permanent camp for 500 of their male employees. Cooking is permitted and practically no charge is made for the sleeping quarters. It is of frame construction and includes only messroom and sleeping quarters. One frame latrine and the flush toilets are kept in good condition. The men cook for themselves and a squad of janitors clean the kitchen floor after each meal. The garbage pails were without lids and the kitchen doors without screens.

The Scovill Manufacturing Co. provides a camp for fifty employees engaged on the Chestnut Hill Reservoir, near Waterbury. It consists of three frame shacks supported on posts. They obtain their water from a driven well which is piped to the kitchen.

The garbage is dumped in the woods not far from the mess room, and in the absence of screens, there is a multitude of flies.

Verbal Orders

Inasmuch as the insanitary conditions have far-reaching results, and were possibly the cause of the serious dysentery at Camp Crailo, and probably the cause of dysentery at Camp Wopowog, and suspected as the cause of the typhoid epidemic at the Plainville Camp Grounds, we have ordered certain installations in equipment, and the use of sanitary methods where necessary.

In many cases these instructions were appreciated. An example of this fact is at Camp Wopowog, where the proprietor thought it was impossible to have the kitchen floor scrubbed. The investigator suggested this be made a duty of the night watchman, as this would not interfere with the routine work of the day.

In many cases, we ordered the adoption of metal garbage pails with lids; screen doors and windows were frequently absent or in need of repair, and this condition was ordered to be corrected. The real test of the orders cannot now be determined, as no systematic follow-up work was done.

RE-INSPECTIONS

Re-inspections for various reasons were made of vacation camps following the preliminary survey of 1919. The camps visited, with their locations, are as follows:

Ansonia, Y. M. C. A. Camp
Bantam, Camp Acarming
Bantam Lake, Litchfield Vacation
Home
Cornwall Bridge, Camp Shadow-
brook

East Haven, Camp Silver Sands
East Haddam, Camp Bethel
Ellington, Hartford Girl Scout Camp
Lakeville, Camp Harlam
Milford, Camp Tribune
Winsted, Camp Pioneer

**• CONNECTICUT
STATE DEPARTMENT OF HEALTH
MEMO FOR INSPECTION OF CAMPS.**

General:

Location			
Name of camp			
Person interviewed			
Date of survey			
Capacity of camp	ages	sex	detail
Charity or profit			
Permanent or summer			
Date of construction;	type		
Foundation			
Soil condition, slope			
Proximity to ponds			
Medical exam. required?			
General maintenance and appearance			
Extra quarters for isolation?		Distance?	
Amount of ground	shore	river or lake	
Physician in attendance			

Specific:

Screens
Light
Ventilation
Dampness
Construction
Floor covering
Heating

Water Supply:

Source	Treatment	Tanks
Distance from cesspool or water closets		
Surface drainage		
Liability of contamination		
Shelter		
Drinking facilities: individual cups		: fountain

Remarks:

**CONNECTICUT
STATE DEPARTMENT OF HEALTH
MEMO FOR INSPECTION OF CAMPS.**

Menroom:

Proximity to toilets		
Facilities for boiling water		
Metal pails for water		
Cleanliness of utensils	garbage pails	
tables	emptied frequently	
floors		
Protection of food from;	dust	
	flies & vermin	Many flies?
Are dish cloths boiled		

**REPORT OF BUREAU OF CHILD HYGIENE
AND PUBLIC HEALTH NURSING**

REPORT OF BUREAU OF CHILD HYGIENE AND PUBLIC HEALTH NURSING

John T. Black, Commissioner of Health, Hartford, Connecticut:

I have the honor to submit the first annual report of the Bureau of Child Hygiene and Division of Public Health Nursing, this report being for the year ending June 30, 1920. The Bureau of Child Hygiene of the State Department of Health was created by a Legislative Act in 1919, effective July 1 of that year. This is the first official recognition of child hygiene work by the state government, although the Council of Defense did, as a war measure, create a Division of Child Hygiene.

The State Department of Health, which was prior to 1917 designated as the State Board of Health, had for a number of years paid particular attention to the health of the child. These efforts consisted in the encouraging of milk and school inspection, local nursing service, and the publication of literature for the education of the mother. The first recorded activity of the State Board of Health along these lines is a discussion on the necessity for child welfare work by Prof. E. H. Jenkins, which can be found in the report of the State Board of Health for the year 1886.

As before stated, the first organized child hygiene work by the state was undertaken in June, 1918, when the Women's Committee of the State Council of Defense undertook the responsibility for carrying out the program outlined by the Children's Bureau at Washington. This program had for its first activity the weighing and measuring of all children under five years of age and was the entering wedge for a comprehensive state-wide program for the conservation of child life.

The State Department of Health, when it took up the work in July, 1919, was able to retain the Director of the Child Welfare Campaign for the Council of Defense as Director of the Bureau of Child Hygiene, and this report represents really a continuation and greater development of the work organized by the Council of Defense.

As child welfare work depends largely upon public health nursing, it was early decided to create a Division of Public Health Nursing within the Bureau.

An appropriation of \$25,000 for a two-year fiscal period was made available for carrying out the work.

SCOPE OF ACTIVITIES

The activities of the Bureau of Child Hygiene have been grouped under four heads:

1. Prenatal (care of the mother)
2. Infancy (birth to 2 years)
3. Pre-school (2 to 6 years)
4. School (6 to 16 years)

Prenatal

The conservation of child life by assuring the proper care and treatment of the expectant mother will, undoubtedly, greatly reduce the infant mortality. Of the infant deaths on record, almost one-fourth die within twenty-four hours after birth; this with the record of over 1,200 stillbirths each year, indicates conclusively the necessity for prenatal care. The Bureau has been endeavoring to secure visiting nurses for every community and instruct them to pay particular attention to this phase of the work. An effort is also being made in larger centers of population to increase the clinic facilities for pregnant women.

Infancy (Birth to 2 years)

Most of the endeavors in child hygiene in the past have been for the children of this period and a great saving of lives has been accomplished. Particularly is it noticeable in the reduction of diarrhoeal disease, which was a most prolific cause of death of children of this age. The greatest factor in reducing deaths from diarrhoea is the improving of the milk supply, and closely following this is the education of the mother in the care of the infant. An arrangement has been made whereby local nurses are supplied with birth lists weekly, enabling them to proffer assistance and advice to every mother within a short time after the birth of her child. Improvement in milk supplies has been going on gradually for a number of years, being carried out by the local health officer, the State Dairy and Food Commission and the State Department of Health,

CONNECTICUT INFANT MORTALITY

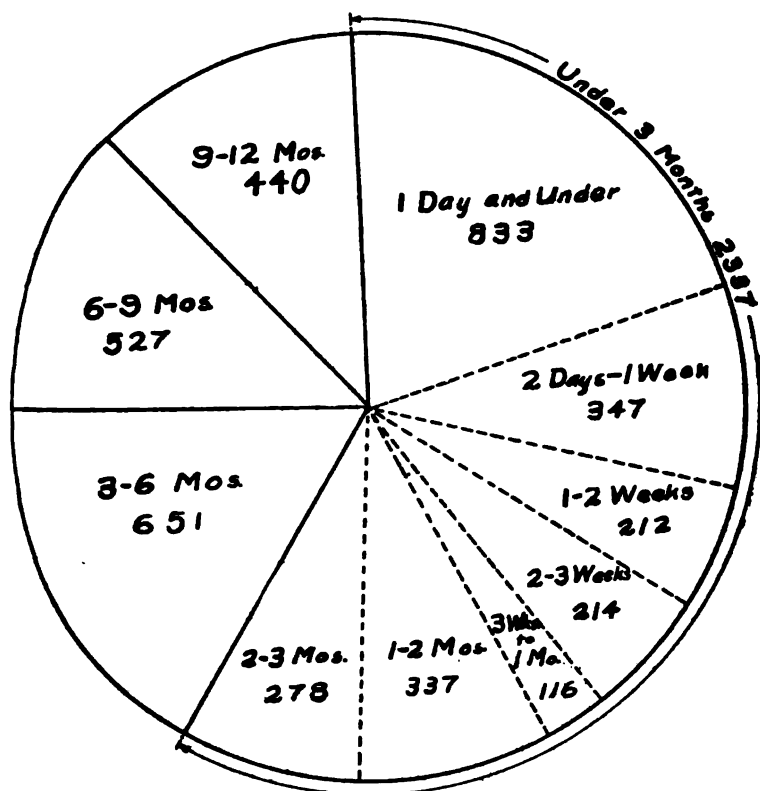
AGE GROUPS

3,955 babies under one year of age died in Connecticut in 1918.
2,337 babies died when less than three months old.

59% of infant deaths occurred within the first three months of life.

833 babies died within one day after birth.

21% of infant deaths occurred before the babies were two days old.



The education of mothers has been through the visiting nurse, bulletins, exhibits, moving pictures and the press. Milk stations have been established in many places and these have been particularly valuable in the summer in supplying good milk at a price within the reach of all. Perhaps the most effective work accomplished by the Bureau for the children of this age has been the placing in the hands of the mother of every new-born child a booklet on the care of the baby. This method of reaching the mothers was adopted by the State Department of Health before the Bureau of Child Hygiene was created. The booklet sent to the mothers is the bulletin published by the Children's Bureau of the Federal Government.

Pre-School (2 to 6 years)

This is the most difficult group of children to approach and, for that reason, for which the least has been done. As children of this age spend much of their time out of doors, the efforts of

this Bureau have been confined to the encouraging the establishment of playgrounds and other recreation measures and to the education of these children and their mothers in principles of hygiene and safety first.

School (6 to 16 years)

School inspection has been well developed in many localities for a number of years, although the degree of efficiency in conducting this work has been quite varied. The Bureau has endeavored to establish standards of qualifications for those engaged in this work as well as standards for methods and reports. A large part of the work has been the endeavor, by personal conferences and otherwise, to induce communities not having school inspection to introduce such a system and to assist them to arrange for the support of a nurse to carry on the work.

General

Much of the work of the personnel of this Bureau has been to stimulate local interest in child welfare work. This has been best accomplished through existing public health nursing associations, local Red Cross Chapters, Public Health Associations and Women's Clubs. Every effort has been made to coöperate with the local health officers.

The visiting or public health nursing idea appeals to all, and to introduce Public Health Nursing has, therefore, been the first move in towns where no such service existed. Where nursing organizations have been in operation, stress has been laid upon the necessity for extending the work and enlarging the field of usefulness of the nurse. Even the visiting nurse can double her value to the community by systematically disseminating the principles of hygiene and public health in the homes where she is giving bedside service.

The duties of the Public Health Nurse must be adjusted to the size and conditions of the community in which she is to work. The rural nurse must do bedside nursing, prenatal instruction, post-partum care, educational work, and at times special nursing, such as tuberculosis. In large communities, special nurses must be prepared to handle other problems. It is believed that the time is coming when, except for school nursing or other large individual problems, the public health nurse will be assigned to a district or zone, within which she will render any and all nursing service needed.

Previous to June, 1918, 39 towns and cities had some form of public health nursing service, some of which were doing very effective work in child hygiene. Not many of the smaller towns, however, were organized for child hygiene and public health nursing, even though their need was to some extent recognized.

It is with much satisfaction that we are able to report that we have been able to assist ten towns in organizing Public Health Nurse Associations in the past year, and they are now, as far as possible, carrying out the program outlined by this Bureau. These towns are Glastonbury, Groton, Hamden, Meriden, Milford, New Milford, Old Lyme, Plainville, Stratford and Willimantic.

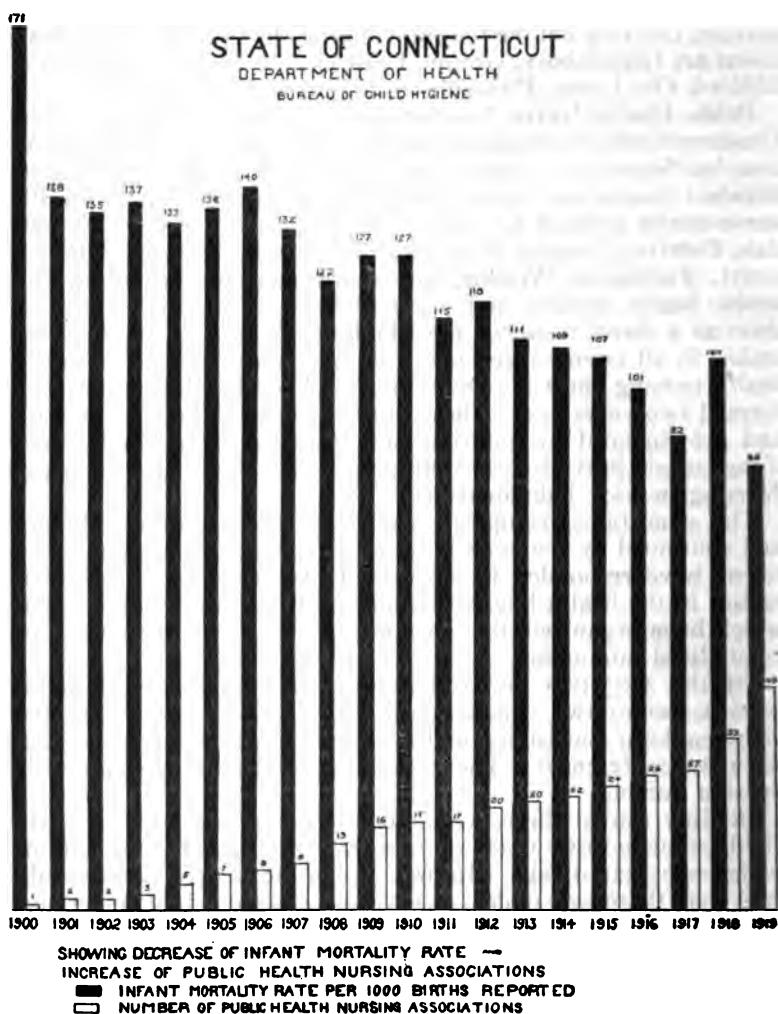
Public Health Nurse Associations have also been organized in Cheshire, Guilford, Madison and Newtown, and will be in operation by September. Essex, Stafford Springs, Waterford and Windsor Locks are ready to start when a trained public health nurse can be secured for each. The towns of North Grosvenordale, Pomfret, Putnam, Seymour, Southington, Terryville (Plymouth), Torrington, Wallingford and Watertown organized for public health nursing and began their work in 1918, most of them as a direct result of the Children's Year Campaign. This makes in all twenty-three towns that have organized for public health nursing since the Division of Public Health Nursing was formed two years ago. These nursing organizations are private and are financed by contributions from the town, Red Cross, Tuberculosis Seal Money, Metropolitan Life Insurance Company Nursing Service, individuals, etc.

The educational campaign started by the Children's Bureau and continued by the state is bearing fruit in Connecticut. The towns have responded in a splendid manner to their responsibilities in the health line, and aside from the twenty-three towns which have organized, there are many more that are about to be crystallized into action.

Of the sixty-two towns that now have public health nurse service, twenty-two conduct well-baby conferences weekly, and eighteen keep the babies under observation in their homes but have no conferences. The remaining twenty are doing mostly bedside nursing.

In July, 1919, there were under nursing supervision 2,316 children under five years of age, of whom 2,117 were infants under one year of age. In July, 1920, incomplete reports indicate that there are under supervision 4,622 children under five years of age, 4,134 of whom are infants.

The increased number is due not only to the increased number of Public Health Nurse Associations, but to the fact that many nursing associations started previous to 1918 are doing more intensive infant hygiene work. The table given on next page shows in graphic form the relationship between the increase in Public Health Nurse Associations and the decrease in infant mortality. While it is not claimed that the public health nurse has been the sole factor in this reduction, it cannot be questioned but that increased nursing service has been a decided factor in obtaining this great reduction in infant mortality.



Birth Registration

A state that does not have accurate statistics of births and deaths is very much handicapped in undertaking measures for the protection of life and health. Constructive welfare work is quite impossible without careful birth registration. In the United States, only twenty-three states and the District of Columbia keep their birth records with sufficient accuracy to admit them to the United States birth registration area. Connecticut is included in the birth registration area and is endeavoring to secure still better registration of births by sending a birth certificate to the mother of each new-born baby. Parents not receiving

STATE OF CONNECTICUT	DEPARTMENT OF HEALTH
Birth Certificate This is to certify that	
<u>John Winthrop Newcomer</u>	
was born at <u>Mt. Pleasant City</u> — <u>Jan. 1, 1920</u>	
Father's name <u>Isaac Putnam Newcomer</u>	
Mother's maiden name <u>Priscilla Dowell</u>	
The full record of this birth has been carefully filed and is preserved in the archives of this State of Connecticut.	
	<u>Wm. H. Wood</u> Governor <u>John T. Black, Jr.</u> Commissioner of Health
EVERY MOTHER IS ENTITLED TO A BIRTH CERTIFICATE FOR HER CHILD.	

these certificates realize that the birth of their child has not been reported and consequently see that it is recorded. The birth certificate is accompanied by the leaflet "Infant Care," published by the Federal Children's Bureau. This undertaking has proved fruitful not only because each child has in his possession his birth certificate and the mother has at hand a booklet that tells in simple language the fundamental things necessary for infant care, but because it is making people realize that the state has a very definite interest in each baby. Splendid as is this method of getting birth certificates to each child, this Bureau has gone a step further and has made arrangements with some of the local health officers and public health nurses whereby the certificates will be delivered personally by the public health nurse. Bridgeport, Meriden and New Haven are already delivering the birth certificates and other towns and cities are preparing to do so.

The advantage of this method is very apparent, for it is well known that it is the personal contact with instruction in the baby's home, rather than teaching by pamphlets, that brings best results in reducing infant deaths. This method also gives the public health nurse a chance to get in touch with infants at a much younger age, and the opportunity to get in touch with many who might otherwise come under supervision too late.

Educational

In line with other activities of the Bureau, special effort has been made to supply charts, films and slides to communities throughout the state. The films, "An Equal Chance," purchased in April, 1920, and "Our Children," purchased in January, 1920, have been shown nineteen times in seventeen different communities. Slides on child welfare, public health nursing and school nursing have been much in use. A description of each slide which makes a story has been prepared to accompany each set of slides. This has proven very helpful as it has enabled some local person to give talks with the slides when no one from this Bureau could be present. A portable moving picture machine and a balopticon lantern have been most helpful in showing films and slides in towns where no machine was available. Literature has been supplied to Visiting Nurse Associations, mothers' meetings, towns, baby conferences, etc.

Public Health Nursing

Aside from the help this Bureau has given in helping towns organize for public health nursing, special emphasis has been directed towards those that had public health nurses but whose main activity heretofore had been bedside nursing, with no special attention being given to child welfare or tuberculosis nursing. In many of these towns the geographical location is such that well-baby conferences are not possible. It is possible, however, to keep the babies under supervision in their own homes and many public health nurses are now doing this.

More tuberculosis nursing is also being done. This increased amount is due not only to the increased number of Public Health Nurse Associations whose program to-day includes tuberculosis nursing, but to the Superintendents of the State Tuberculosis Sanatoria who hold clinics in towns convenient to the sanatoria.

In the development of the school nursing we have coöperated with the State and local Boards of Education, and many talks given by this Bureau have resulted in the employment of additional school nurses.

Coöperation with the Red Cross

An arrangement was made in April, 1919, between the State Department of Health and the American Red Cross, whereby the State Department Director of Public Health Nursing was appointed the Red Cross Field Director of Public Health Nursing in Connecticut. The entrance of the Red Cross into public health nursing with their peace-time program has meant much in the development of this line of work in Connecticut. Aside from the eight towns whose nursing services are affiliated with the Red Cross, many Public Health Nurse Associations have received financial help and support from local chapters.

Coördination of Public Health Nursing Service

As the field of public health nursing continues to expand at such a rapid rate, the number of available trained public health nurses grows to be relatively smaller. Consequently it is necessary for every town to use its present nursing service to the best possible advantage. By so doing it will also permit earlier introduction of nursing service in localities which are now without any service. Several towns have had from two to five organizations doing different branches of public health nursing without much coöperation and have recognized the advantage of coördinating their nursing activities. This Bureau has been invited to assist in effecting these changes. There are many other towns where such coördination has not been undertaken, but which will undoubtedly make such readjustment in time.

Standardizing Nursing and Nursing Reports

A start has been made in standardizing public health nurse records and reports by supplying new associations with the first installment of nursing records, using those prepared by the National Organization for Public Health Nursing. We are urging associations who have been in operation for several years and whose records are very inadequate, to use this standard record form and several have agreed to do so when their new fiscal year starts. Minimum standards for nursing personnel have been adopted, and every effort is made to place only such nurses as are well qualified for the work.

One of the large pieces of work of this Division of Public Health Nursing has been assisting in securing and placing public health nurses. As the development of public health nursing is dependent to such a large degree upon getting a nurse who has had training or supervised experience in public health nursing, this Division decided when it came into existence that it would not recommend for starting public health nursing any nurse who did not have either of the above requirements. While this has

meant that many towns have had to wait months in some instances for the right kind of a nurse, with the exception of very few towns they have all seen the advantage of waiting for a qualified nurse and have taken those recommended by this Department.

Recruiting Nurses

This Division has coöperated in every way possible to increase the number of trained public health nurses. Lectures on public health nursing and opportunities therein have been given to student nurses and we have seized every opportunity to present public health nursing to graduate nurses. In coöperation with the State Committee on Public Health Nursing, of which the Director is Secretary, the Division undertook the task of increasing the number of student nurses by getting in touch with every town in Connecticut and urging them to conduct some form of exercises in order to interest more girls to enter hospital training schools. This was done in connection with the Florence Nightingale Centennial Celebration.

Four scholarships for training in public health nursing were given by the New Haven Red Cross Chapter and two by the Waterbury Red Cross Chapter. This has been very helpful for five of these nurses are to begin work in August, 1920, in communities that heretofore have had no public health nursing service. Aside from the Red Cross scholarships, five were given previously by the Women's Committee of the State Council of Defense in February, 1919, and to-day these five nurses are doing splendid work in five towns in Connecticut.

Compiling a List of Registered Nurses

In accordance with Chapter 120 of the Public Acts of 1919, registered nurses are among those who must register annually with the State Department of Health. As no list of registered nurses was available, the task of compiling such a list was assigned to the Division of Public Health Nursing.

Loan Library

A loan library of books and pamphlets on child welfare and public health nursing has been used to a satisfactory extent by the nurses throughout the state.

Child Hygiene Institute

In June, 1920, a two-days' Child Hygiene Institute was conducted by this Bureau. The program included talks and lectures by men and women who are specialists in their own lines. The meeting, which was planned primarily for health officers and

public health nurses, was attended by a large number of lay people. Trips were given to the Children's Pavilion of the Hartford Tuberculosis Sanatorium, Hartford Isolation Hospital and the Hartford Baby Health Station, where the work and methods were explained in each place by the Superintendent. This was the first attempt in conducting such an Institute and we think it well paid for the time and money expended.

Correspondence

There have gone out from this Department 2,613 pieces of mimeographed work and 1,003 letters were written during the year. This correspondence covered a wide range of subjects. These letters were in reply to inquiries not only regarding the work of this Bureau but in reply to inquiries about all phases of child hygiene and public health nursing. Such inquiries covered how to organize for child hygiene and public health nursing, prenatal and post-partum care, advice on exhibits, clothing and feeding of infants, well-baby conferences, tuberculosis, school and industrial nursing, where positions were vacant, where nurses could be secured, information about scholarships, etc.

Talks

Talks to lay groups in 36 towns	43
Talks on public health nursing to nursing groups	12
Talks on public health nursing to student nurses	4
Nurses interviewed about public health nursing	77
Conferences outside of office with nurses and directors	40
Other interviews about child welfare and public health nursing	58

The personnel of this Bureau has consisted of a Director, one stenographer and one clerk. In January, 1920, an Assistant Director was added.

The Bureau has received much help, and in turn has given help to state and local organizations such as the State Board of Charities, State Tuberculosis Commission, Mothers' Clubs, Granges, Home Demonstration Agents, Parent-Teachers' Associations, Red Cross and State and Local Nursing Organizations. By talks, lectures, films, slides and literature we have helped many towns realize that the care of infants and children demands first of all the services of a public health nurse, well-baby conferences and medical and nurse inspection of schools.

Summary

The past year has been one of feeling our way, at the same time laying a foundation for the future. With the increased number of towns who employ public health nurses and school nurses, and

**TABLE SHOWING DECREASE IN INFANT MORTALITY
1900-1919**

Year	Deaths under one year	Births	Infant death rate
1900	3,521	20,560	171.2
1901	2,805	20,204	138.2
1902	2,864	21,216	134.9
1903	2,972	21,751	136.6
1904	3,033	22,864	132.6
1905	3,159	23,271	135.7
1906	3,455	24,641	140.2
1907	3,433	25,945	132.3
1908	3,251	26,694	121.7
1909	3,365	26,431	127.3
1910	3,472	27,314	127.1
1911	3,247	28,176	115.2
1912	3,430	29,039	118.1
1913	3,347	30,122	111.1
1914	3,480	31,910	109.0
1915	3,499	32,725	106.9
1916	3,579	35,455	100.9
1917	3,466	37,569	92.2
1918	3,962	37,158	106.6
1919	2,928	33,943	86.2

INFANT MORTALITY 1919

Showing Towns With Population Of 10,000 And Over

Towns	Births	Deaths under 1	Infant mortality rate per 1,000 births
Hamden	168	7	41.6
Meriden	817	41	50.1
New London	750	44	58.6
Manchester	391	26	66.4
Bristol	569	41	72.1
Enfield	319	23	72.1
New Haven	4,391	320	72.8
Wallingford	232	17	73.2
Stratford	299	22	73.5
Norwalk	489	37	75.6
Torrington	519	42	80.9
Norwich	740	60	81.1
Middletown	606	50	82.5
Stamford	883	74	83.8
Milford	201	17	84.5
Greenwich	474	41	86.4
Danbury	488	43	88.1
Naugatuck	294	26	88.4
Bridgeport	4,498	399	88.7
Fairfield	258	23	89.1
Derby	516	46	89.1
Orange	322	29	90.1
East Hartford	173	16	92.4
Hartford	3,956	373	94.2
Windham	365	35	95.8
New Britain	1,832	176	96.1
Ansonia	526	53	100.7
Waterbury	2,598	295	113.5
Stonington	194	27	139.1
Total Births In State			33,978
Total Deaths Under One In State			2,929
Infant Mortality Rate For State			86.2

who are carrying out a constructive child health program, the babies and children of the state are to-day receiving better care than the infants and children at any previous time.

Connecticut has made a splendid start, but only a start. It appears that further decrease in our infant death rates will come

(a) not only by enlarging what is being done but by having prenatal care and instruction available for every expectant mother.

(b) better medical attention and nursing care at child birth and after, the solution of which will include necessary supervision of midwives.

There is a big field ahead in the work that should be done with the children from 2 to 6, long called the neglected period of childhood. The condition in which the children reach school is an index of what work has been done or not done previous to the school age.

No report dealing with child hygiene would be complete without calling attention to the great need there is in this state for dental work among children. How these conditions are to be improved is a problem, the solution of which depends almost entirely upon getting the needed pieces of work adequately financed.

The popular slogan, "An Equal Chance for Equal Health," appeals to all as a worthy goal, but even in this state this goal is far distant. This is particularly true as far as children are concerned, for there are many who are in need of attention and proper treatment who, for one reason or another, are neglected. It means that we must bend every effort to improve our work for the health of the child, and to lend assistance to all social and educational measures toward child betterment.

(Signed) MARGARET K. STACK,
Director.

SURVEY OF THE SCHOOLS OF SOUTHTON

With a full appreciation of the practical value of guarding the health of school children, the Southton School Board and the Southton Public Health Association, through the personal initiative of Mrs. W. H. Cummings, requested a survey of the schools of Southton, with physical examinations of the school children. This work was done between February 16 and April 9, 1920, inclusive. The results were accomplished through the help of Miss Julia Mulcahy, R. N., of New Haven, with much assistance rendered by Miss Cora De Cormier, R. N., of the Southton Public Health Association and Red Cross, to both of whom much credit is due. Miss Manning, also, rendered indirect assistance.

The physical examinations of the school children included those of 326 children of the South Center School, 214 of Beecher Street School, 218 of Plantsville and 104 of North Center, which are herein tabulated, and of 26 children of the Mount Vernon School and 64 of the Lincoln School, which are not included in the tabulations. The detailed records of all the examinations made were deposited with the Southton Public Health Association for future use in follow-up work.

The practical and actual control of communicable diseases within the schools is a question deserving consideration. The school children of Southton are highly susceptible to diseases. A health census of five schools showed that only about one-fourth of the children have had chicken pox; one-fifteenth have had diphtheria (a very high percentage); one-sixth have had German measles; one-half have had measles; one-tenth scarlet fever; one-fourth whooping cough and at the commencement of the survey only twenty per cent of the children had ever been vaccinated. The census divulged the fact that seven teachers in these schools are not protected from smallpox and are, therefore, more or less apt at any time to contract the disease, to spread it before they are conscious of what they have, and are liable to disrupt the working of the schools by contracting an easily preventable disease.

This census shows how susceptible are the children to diseases, since every child who has not had a communicable disease must be regarded as susceptible to it, until his immunity is demonstrated. A means for controlling the diseases and for decreasing their spread within the schools needs to be adopted, both as a matter of safety and of economy. The diphtheria outbreak in Miss Wrinn's room proved the fallacy of the old method. The planning of a method is easy and its adoption is simple provided the popular local conscience wants it and will support it.

The enthusiasm of the people to have their children vaccinated indicated the universal willingness to accept this valuable protection against disease. In the 480 vaccinations performed during the survey the enthusiasm of the people was wonderful. The advisability of continuing this work until all become vaccinated is apparent. I thoroughly believe that compulsory vaccination is a sound principle for American Government, as susceptible people may acquire and spread smallpox without knowing it. If we all could be vaccinated or permanently immunized against diphtheria and the other diseases we should be obliged to thus protect the public from the dangers of the diseases. Now that the people understand and realize that vaccination is so harmless, the opportune time to require vaccination of all school children and school employees has arrived. It is unjust to require it of the children and not of the adults.

In the examinations of the children many conditions were found which were not tabulated in the regular list. These included 8 cases of skin disease, 8 of inflammation of the inner ear (two being acute and requiring immediate attention), 5 of heart disease (one previously unknown to the parents), a new case of hip disease and one of scoliosis, one of corneal ulcers requiring hospital attention, and one of acute appendicitis requiring immediate operation.

It was necessary to exclude from the school a total of 75 children; measles 6, measles suspects 4, chicken pox 2, scarlet fever suspect 1, scabies 2, tonsilitis 1, and of pediculosis 59 cases. The total number of children with pediculosis (including nits) was 219, or just one-fourth of the entire school population.

Many cases were referred to the Red Cross Clinic for treatment.

The tabulated examinations of 843 school children showed that eight children could see, with either eye, no better than the 100-foot letters at a distance of 20 feet, virtually blind. Sixty-nine had very poor vision, reading, with one or both eyes, no better than the 40-foot line. Only 256 children had what may be termed normal vision, being able to read most or all of the 15-foot line—reading from a distance of 20 feet the letters which are practically always decipherable to a normal eye. Some of these children had slight astigmatism or eyestrain. Very marked astigmatism was noted in 116 children and yet only 18 children in these schools were found wearing glasses. The need of correction by proper eyeglasses to save the remaining sight and to correct the vision to normal is apparent.

Since the teeth play an important part in the health and comfort of a person, emphasis was given to the condition of the teeth of the children. A very common occurrence was the finding of absolute neglect of the teeth and the condition of the mouth. Pyorrhea is exceedingly common. Many, many teeth were found

in offensive condition, green with moulds, rotting from neglect. Only 281 children were regarded as having clean teeth, in about one-third of the children. This ratio corresponds with that of the children who brush their teeth regularly every day. A census of 692 children showed that 69 per cent had tooth brushes and about half of them brushed their teeth daily; 38 per cent of the total school population were giving daily attention to their teeth. The talks upon dental hygiene to two schools resulted in an increase in two weeks from 71 to 85 per cent in the number having tooth brushes and from 45 to 63 per cent using the tooth brush daily.

It was further found that these 843 children had only 163 teeth which had previously been filled and they had 1,635 carious teeth which needed immediate filling. They had very many other conditions and teeth needing other attentions. The school work evidently was the force which induced 21 children to seek dentists and receive treatment within a week of the time of the school examination.

Adenoids were recorded as probably being present to a damaging degree in 52 children. These adenoids should all be removed.

Enlarged tonsils were seen in 145 children. It could not be determined how many of these tonsils should be removed. Bad teeth were present in many of these children and may have been the cause of the abnormal enlargement of the tonsils. The teeth should be put in first-class condition first, and the tonsils considered later.

Carious teeth are always dangerous as long as they have cavities which are open to admit infection. The enlargement of the glands of the neck prove this statement. Enlarged glands are abnormal. They enlarge because they are infected and necessarily become abnormally enlarged to perform greater work to destroy the infection. It was found that 324 children had enlarged glands in the neck and 81 per cent of these children had carious teeth. The enlarged gland must therefore be regarded as an indication of general infection from the teeth and as proof of the need of competent dental attention.

Deafness is chiefly of school concern in that it explains inattention or backwardness and may indicate the presence of adenoids. Where deafness or mouth-breathing exist adenoids should be suspected. Two children were found almost totally deaf, one certainly because of adenoids. The acuity of hearing had decreased to one-fourth of normal in 55 children in both ears, and in 77 others in one ear. Impacted wax was the cause of decreased hearing in many of these children. Some children become deaf from measles.

It became necessary to exclude 75 school children for the fol-

lowing diseases: measles 6, measles suspects 4, varicella 2, scabies 2, tonsillitis 1, scarlet fever suspect 1, pediculi 15, and for retaining nits 44. Another child was sent home because of acute appendicitis and four others were advised to leave because of headache of intestinal origin.

Pediculosis was handled by personally explaining to each child just what to do to get rid of the condition. At a reinspection, if nothing had been done, a note was sent to the parents. When the note was disregarded the child was excluded from school. The immediate result was a very marked cleaning up of the heads. A total of 15 children were found to be harboring pediculi and 209 were infested with nits.

STATISTICAL SUMMARY OF SCHOOL SURVEY

Visits to schools	64
Physical examinations of school children	903
Children inspected for contagious disease	825
Reinspection of children	130
Examinations for other forms of illness	39
Vaccinations	480
Notes written to parents	237
Diphtheria cultures taken	138
Children excluded from school	92
Sanitary inspections and reports of schools	7
School talks given	34

Recommendations

The following recommendations are submitted as suggestions to the Southington School Board, with a full appreciation of the difficulties of obtaining what the Board knows to be ideal and with appreciation of the excellence to which the school standard of Southington has been developed through the earnest sincerity and high efficiency of the Board, especially of its Superintendent and also of its teaching personnel.

1. Adjustable desks are advisable, but I would suggest that when only one or two rows can be installed that they be put in the rear of the room, where they are most needed, rather than as side rows, where, as in a South Center room, they may not be used.

2. The close marching order has been abolished in military organizations as a matter of safety. I believe it should be abolished from schools; it is now practiced at the South Center School especially; close marching or lock-step increases the danger of the transmission of disease.

3. The practice of having one child gather up all the hats and coats of his entire row tends to promote the transmission of disease. I believe each child should hang up his own hat and coat. If the children are required to use certain hooks in order

of their seating arrangements, a whole row may march at a time and hang or collect coats in their regular seating order without any confusion or loss of time.

4. Hook-racks requiring two or more rows should be hung in projecting rows, as in the Lincoln School, but an overlap of ten inches is better than four.

5. Where it becomes absolutely necessary to divide a class room to provide two rooms, as in three rooms in the South Center School, I think it advisable to utilize the illuminated partition for blackboard space rather than to continue using the dark walls between windows. I would recommend that the partition wall be mostly solid, without sash, and made smooth and dull black for blackboards, or the slate boards be moved to the partition. This would also tend to decrease the troublesome noise transmission from one room to the other.

6. In some rooms, notably in the South Center School, the principally used blackboard is in front of the children and is plaster, glossy and cracked. In other parts of these rooms slate boards are placed. If the glossy, cracked plaster cannot be replaced by new slate, perhaps one of the slate boards may be removed to this space.

7. The provision for flushing, by a hose, of the floor slabs of the boys' urinals in all schools is advisable. I would suggest that these be flushed immediately after the noon recess. This will help to decrease the offensive odors so noticeable in some school halls.

8. It is recommended that no toilet windows be nailed shut. A wire grating on the outside will prevent climbing in and also breaking of windows. Several toilet windows are nailed, as are some basement windows, all of which should be in condition to be opened for ventilation.

9. In the North Center School the ventilation of the hoppers in the toilets is good, but better effect would result if an opening were made in the flue near the ceiling, especially over the boys' urinal.

10. In the North Center School, I believe the opening in the wooden partition between the toilets and the basement rooms should be closed by sash, to limit the passage of odors and noise to the basements and up-stairs.

11. The custom of permitting girls to eat lunches in the boys' basement should be abolished, to preserve the health and morals of the children. This practice has existed for the Queen Street children in the North Center School. I would either let the girls eat in their own class room, in the upper hall or out doors. A class room properly ventilated during class hours does not need airing during recess.

12. I consider the basement of any school as a damaging place

for a recitation class. That at the North Center cannot help straining the eyes and perhaps also will affect the general health and moral tone of the children. Basement rooms, properly ventilated, may safely be used for manual training, chemistry or similar laboratory work.

13. Some means of chimney or other exhaust ventilation should be supplied all basements, with special additional means for the toilets. The air should be drawn away from directly over the seats and the urinals.

14. I shall add my condemnation of the double desk and my approval of your attempt to supplant them with single, and preferably, adjustable desks.

15. In the installation of any kind of heating system, I would recommend that provision be made by which the teacher may regulate, or close or open, the heat supply to her own room. The heating and ventilation system of each room should be controlled by the teacher of that room but all teachers should be supervised in this as in other subjects. No heating or ventilation system is spoiled by the opening of windows. No matter what the system, the windows should be open when, by so doing, the children will be benefited.

16. The finding of overheated rooms was not infrequent, nor was an irregularity of temperatures rare. On March 12, with an outdoor temperature of 49 degrees, the Beecher temperatures ranged from 66 to 76 degrees. The room giving this maximum was found frequently that hot, although the temperature records, sometimes completed the following day, do not show it. To keep the schoolhouse warm during the night the janitor would turn hot air into the rooms in the afternoon and at 3.30 P. M. some rooms would have a temperature of 80 degrees or over. This should not occur.

17. I would advise the adoption of out-door classes as soon as the temperature reaches 60 degrees.

18. Since normal children are far-sighted and the attempt to see fine objects tends to a straining of the eyes, especially where the near vision persists for some minutes, the recommendations of the British Commission on the Revision of Teaching Methods is logically sound in principle and practical in application. They advise the use of soft pencils and of stub pens to make broader and more easily read lines and have specified the desirable size of type and kind of paper for books for school children.

19. I would recommend the permanent employment of a school nurse who shall be authorized to recommend children for treatment, to apply such minor treatments as are given in the Red Cross clinic and to exclude children for known or suspected communicable disease.

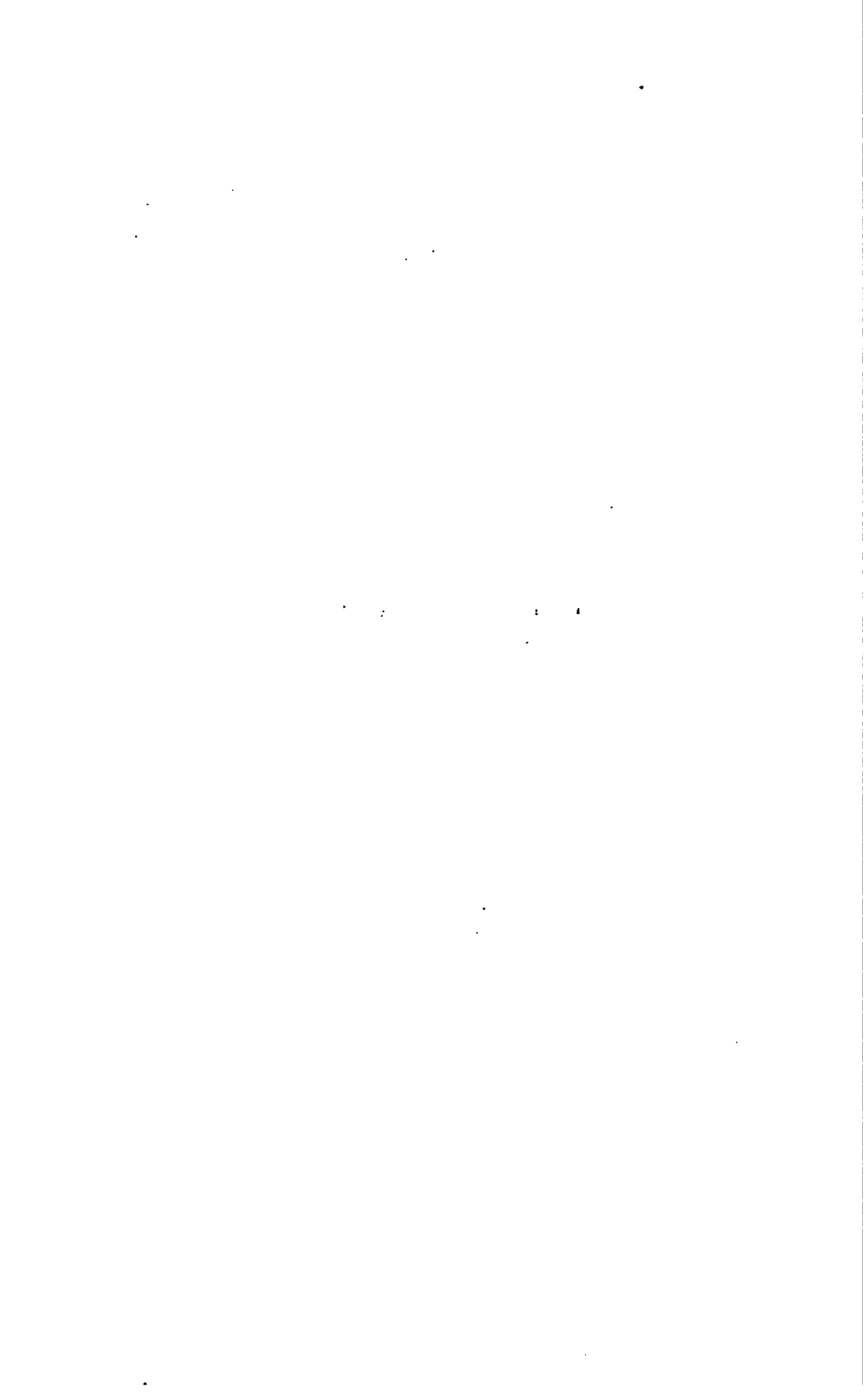
20. Every case of backwardness from suspected physical cause,

of suspected and correctable physical defects and of absence from school because of contagious disease, should, I believe, be reported by the teachers or principals to the nurses for such follow-up work or investigation which the nurses may consider advisable.

21. Since it costs approximately \$56 to teach a child one year in Southington and since the repetition is lost time and a waste of public moneys, it is desirable, and also economical, for some means to be obtained for providing the necessary correction to the correctable physical defects which retard school progress, whenever the parents will not give their children the necessary help.

22. Carious teeth not only retard school work but promote the development of disease. The establishment of school dental clinics, or of a system of dental hours of free service for the indigent, is a community economy.

**REPORT OF BUREAU OF VENEREAL
DISEASES**



REPORT OF BUREAU OF VENEREAL DISEASES

To John T. Black, M.D., Commissioner of Health:

I have the honor to submit herewith the Report of the Bureau of Venereal Diseases of the Connecticut State Department of Health from the time of its formation to the present date.

The work of the Bureau has been maintained in conformity with the original plan outlined by the Interdepartmental Social Hygiene Board and the United States Public Health Service in order to obtain the Federal subsidy, and there has always been a hearty coöperation between these agencies and our Department.

I feel that a careful and unprejudiced digestion of the following report will convince the most skeptical person that a continuance of this great work is an absolute necessity and that there is no room for any curtailment of activities, with the possible exception of film showings.

For the past two years Connecticut, like other states, has been carrying on an unheralded warfare against social diseases. To date, this is the first publication of the vast amount of real work that has been done by the Connecticut State Department of Health assisted by the United States Public Health Service and the several municipal departments of health of the State.

Foreword

The great war has brought a sharp awakening of the American people to the need of facing the world's greatest problem of public health; in fact, one of the greatest achievements which the war has brought about is the realization of the prevalence of this great menace and its destruction of the health of the people. This menace, called social diseases, which includes gonorrhea and syphilis, has for years been cloaked and protected by a sense of false modesty in discussing them. Better known as venereal diseases, owing to the manner in which they are usually contracted, these diseases have been ignored and allowed to go on with their ravages. For years they have left in their wake untold amounts of suffering and misfortune. Whether it be the countless cases of insanity, paralysis, locomotor ataxia, or diseases of the heart and other vital organs which can be traced to syphilis, blind infants, childless marriages, or surgical operations on women that are caused by gonorrhea, we well know that these two diseases have kept our public institutions filled and have caused more deaths than either tuberculosis or cancer.

Not always are these diseases contracted through acts of venery, but oftentimes they strike inexorably the innocent and

helpless. As an instance of the possibilities of an innocent infection, I shall relate a case brought to my attention a short time ago. A young lady, age nineteen, the picture of health and happiness, was sent to me by the welfare worker of one of the largest manufacturing concerns in the State for an examination. This young lady, who was one of the office force in the concern, had been troubled with a sore on her lower lip which she had been treating as a cold sore. Under a microscopic examination the *Treponema Pallida*, which is the germ causing syphilis, was isolated. This case shows a young woman who not only was infected herself, but exposed her fellow workers and family to the disease. Where the infection was contracted is hard to determine, but it is sufficient to say that she is doomed to live through the mental tortures of the syphilitic.

Another case which was brought to my attention a short time ago is that of the twenty-five-year-old wife of an Italian, who was only in this country about a month when the initial lesion of syphilis was found upon her upper lip.

One of the first patients treated by me in a clinic in this State was an ex-soldier who had fought in every large engagement of the World War without an injury, only to contract this dreaded disease from his wife on returning. Space will not permit my relating many cases of the diseases in children either contracted congenitally or from members of their families through contaminated towels, handkerchiefs, etc.

As stated before, these diseases may be contracted by the innocent, so that if dispassionately examined, they can be easily seen to be no more disreputable than other disease enemies of the race. They are no more repellent to the senses than many another ailment. There is nothing in their origin which gives us cause to refuse to know about them; in fact, an understanding of them is the more obligatory upon us because they undermine and attack the most important and vital mechanisms of life itself.

Connecticut's Fight

It was the World War that brought out the concrete facts and figures as to the prevalence of these diseases. We knew the rate of disease in our Regular Army, but when the National Guard and drafted men poured into our cantonments for the first time the high rate of infection among our civilian population was realized.

On April 25, 1918, Rupert Blue, Surgeon General of the United States Public Health Service, wired the State Department of Health outlining a proposed plan and asking the cooperation of Connecticut in the fight against venereal disease. The matter was considered and on June 25, the Board of Control of this State voted its approval, agreed to meet the proposal of the Public Health Service and appropriated \$3,500 for this work. In July,

1918, the Federal Government passed the Chamberlain-Kahn Bill appropriating \$4,000,000 to be distributed to the states for the control of these diseases, each state to appropriate an amount equal to its portion of the Federal funds after the first year.

The work was started immediately. Feeling that New Haven and New London were the two points at which to concentrate our efforts, clinics were started in these cities. This was necessary owing to soldiers and sailors stationed in both cities in large numbers, and their consequent meeting with the civilian population.

About this time the terrible epidemic of Influenza invaded the State and this forced a curtailment of our activities in venereal disease control. This, as well as other branches of public health work, owing to the epidemic, was neglected until February 1, 1919, when the New Haven Clinic was started in the New Haven Dispensary under the direction of the New Haven Department of Health and the State Department of Health. This, the initial step in instituting a state-wide chain of clinics, was brought about by the Commissioner of Health in behalf of the State in conference with the Mayor and Health Officer of New Haven.

New Haven

This Clinic from the beginning was probably the most progressive establishment of the State. Taking over the work being done at the New Haven Dispensary as a nucleus and by means of educational and social welfare work, this institution has grown so that at the present time, there are at New Haven three physicians, a social worker, a male and a female nurse. In need of larger accommodations, the Clinic was forced to take quarters at Grace Hospital Dispensary, 1423 Chapel Street, where at present a modern Venereal Disease Clinic occupying five rooms is in operation.

During the first two years of work, this Clinic has discharged as cured or non-infectious, 1,065 persons formerly infected with a venereal disease and has administered 16,161 treatments.

Not all the activities of this Clinic have been confined to patients from New Haven, as records show patients from the following localities being treated: Ansonia, Beacon Falls, Branford, Bristol, Bridgeport, Boston, Cheshire, Derby, East Haven, Guilford, Gaylordsville, Hartford, Hamden, Madison, Meriden, Milldale, Middletown, Milford, Naugatuck, New Milford, Orange, Seymour, Stratford, Saybrook, Shelton, Southington, Somers, Wallingford, West Cheshire, Waterbury, Woodbridge, Yalesville.

Bridgeport

The State Department of Health then turned its attention to

Bridgeport, intending to interest the necessary parties and establish a Clinic in this large industrial city. Arrangements were made with the Bridgeport Department of Health to house the Clinic in the Welfare Building at Washington and Madison Streets, and from the beginning it has rendered a valuable service to the community. Statistics show that in the period ending December 31, 1920, Bridgeport has cured in its Clinic 432 persons and has administered 10,656 treatments, thus eliminating a large source of infection and a possible menace to the public health.

New London

In April, 1919, the State Department of Health finally completed arrangements and established a Clinic in New London which is known as the State and Municipal Clinic. This Clinic, now located at 35 Church Street, has been somewhat handicapped in its operation owing to a fire, which necessitated the closing of the institution for several months. Notwithstanding this misfortune, the clinic was successful in curing or rendering non-infectious 103 cases and administering 1,002 treatments.

Stamford

In July, 1919, the Stamford Clinic was organized and located at 316 Main Street. It has been rendering valuable service to the surrounding towns in the southern part of the State. Up to January 1, 1921, the Stamford Clinic discharged 320 patients as cured and administered 1,458 treatments.

Some of the localities from which patients have come to the Stamford Clinic are: Norwalk, South Norwalk, Darien, Greenwich, Noroton, New Canaan and Sound Beach.

Waterbury

It was October, 1919, before suitable arrangements could be made in Waterbury. Assisted by the Waterbury Department of Health, the State instituted and maintained a Clinic in the basement of the City Hall. This Clinic not only cared for the large number of cases seeking treatment from Waterbury, but also treated patients from Naugatuck, Watertown, Bristol and Thomaston.

Hartford

The last Clinic to be established in the State is located at Arch and Prospect Streets, Hartford. This Clinic, late in getting started owing to their inability to secure a favorable location and the delay in shipping equipment, is to be congratulated on

the good showing it has made. In the first fourteen months of its existence, the Clinic has cured 258 infected persons and given 3,576 treatments.

That the surrounding communities are taking advantage of the Clinic can be seen by the following places from which patients have come: Manchester, South Manchester, Newington, East Hartford, Windsor, New Britain, Bristol, Wallingford, Unionville, Wethersfield, Ellington, Portland, Simsbury, Bloomfield, Bolton, Elmwood, Burnside, Farmington and Avon.

Treatment Stations

In the smaller towns of the State where it is inadvisable to establish clinics due to excessive cost of overhead, a means of treating these cases was sought. The State Department of Health made arrangements with physicians for the installation of a series of Treatment Stations in these physicians' private offices. To date, there are Treatment Stations in Farmington, Meriden, Naugatuck, Middletown and Willimantic. In the near future we hope to be able to make similar arrangements in Putnam, Danbury and Torrington. When this is accomplished, the State will be well organized for the treatment of persons needing assistance who are unable to employ a private physician.

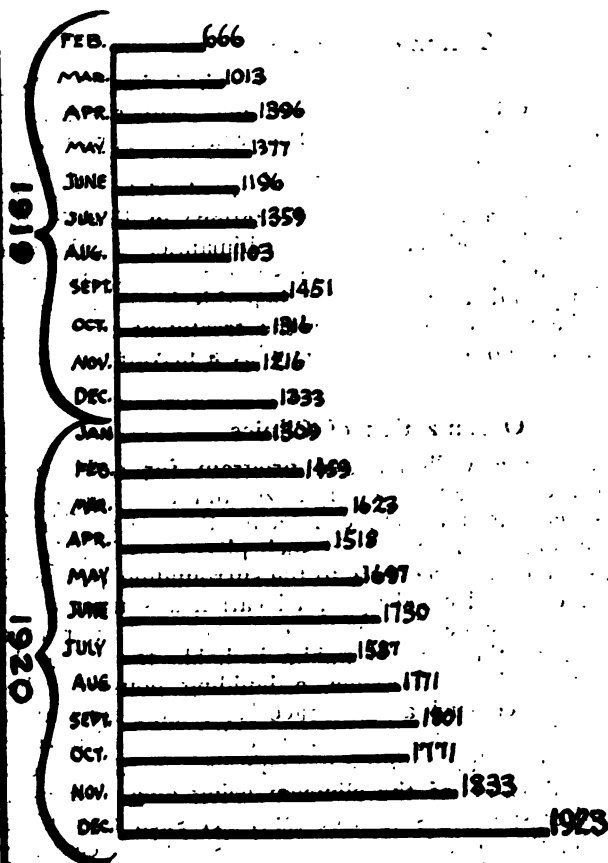
Organization of Clinics

The first step in a well-arranged program for a Venereal Disease Control Campaign is to organize and maintain places where persons needing treatment can secure the same. This is accomplished by instituting clinics in such places, preferably the larger cities, as are easily accessible to the surrounding communities. When the city is decided upon, a location is sought which is central but at the same time not too conspicuous, nor in a neighborhood where the general public is liable to notice the patients being treated. If possible, a building housing other clinics is the ideal place, such as the Grace Hospital, New Haven, or Welfare Building, Bridgeport. The establishment of a venereal disease clinic in such a building not only protects the patient, but has the added value of the clinician being able to consult with various other specialists if necessary. If such a building is not obtainable, the next location to seek is a place centrally located, but not too public.

After the clinic is located, it is necessary to inform the persons needing its services as to the location and clinic hours. This can be accomplished by means of placards placed in public toilets, distribution of literature, etc.

State's Clinic Attendance

FEB. 1919 - DEC. 31, 1920



An Original Method of Advertising Adopted by the

Connecticut State Department of Health

"WANTED—MEN (WOMEN) SUFFERING FROM private diseases, **not able to employ a physician, will be given** advice and treatment free at Board of Health Clinic, Arch and Prospect Streets, Mondays, Wednesdays and Fridays, at 6:30 P. M."

The above method of advertising, utilizing the "Help Wanted" Column, was used, feeling that some of the people who were reading this column were in need of ~~free~~ treatment. The method was quite successful and ~~was later~~ adopted by the U. S. Public Health Service to be used in other states.

Another means of stimulating interest was the ~~education~~ of the public in the ravages and results of the diseases. This was done by lectures before public and private gatherings as well as motion picture shows. To the present date, the State Department of Health has given 317 motion picture exhibits to audiences numbering 206,305 and has distributed 205,395 pieces of literature.

That the educational and publicity measures were a tremendous success is shown by the steady growth of clinic attendance.

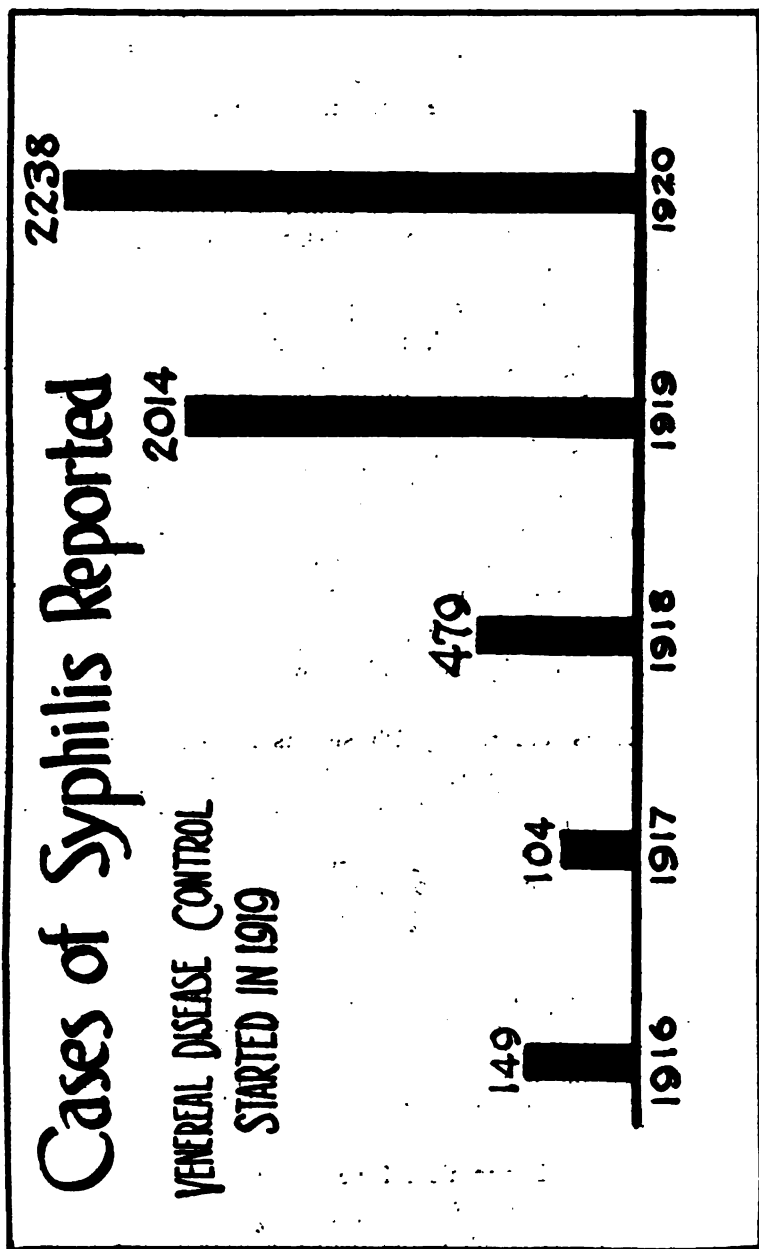
Cases Treated by Physicians Increase

That the educational measures used by the State Department of Health really brought the people to a realization of the seriousness of venereal diseases and also prompted them to seek treatment is indicated by the attendance at the State Clinics and also by the number of cases treated by private physicians. The accompanying chart will show the effect of the educational campaign as evidenced by the marked increase in cases reported in 1919 and 1920.

This increase does not mean that there are more cases than previous to 1919, but establishes the fact that the people are really seeking ~~expert~~ treatment as administered by physicians rather than making use of self-treatments. We can expect that within the next few years these numbers will begin to decrease.

Economical Investment

We are proud of the fact that although many states are expending more money per capita than Connecticut, the amount of good work accomplished by this State exceeds by far the other states of equal population.



Connecticut's Activities as Compared with States of Equal Populations

July 1, 1918—June 30, 1920

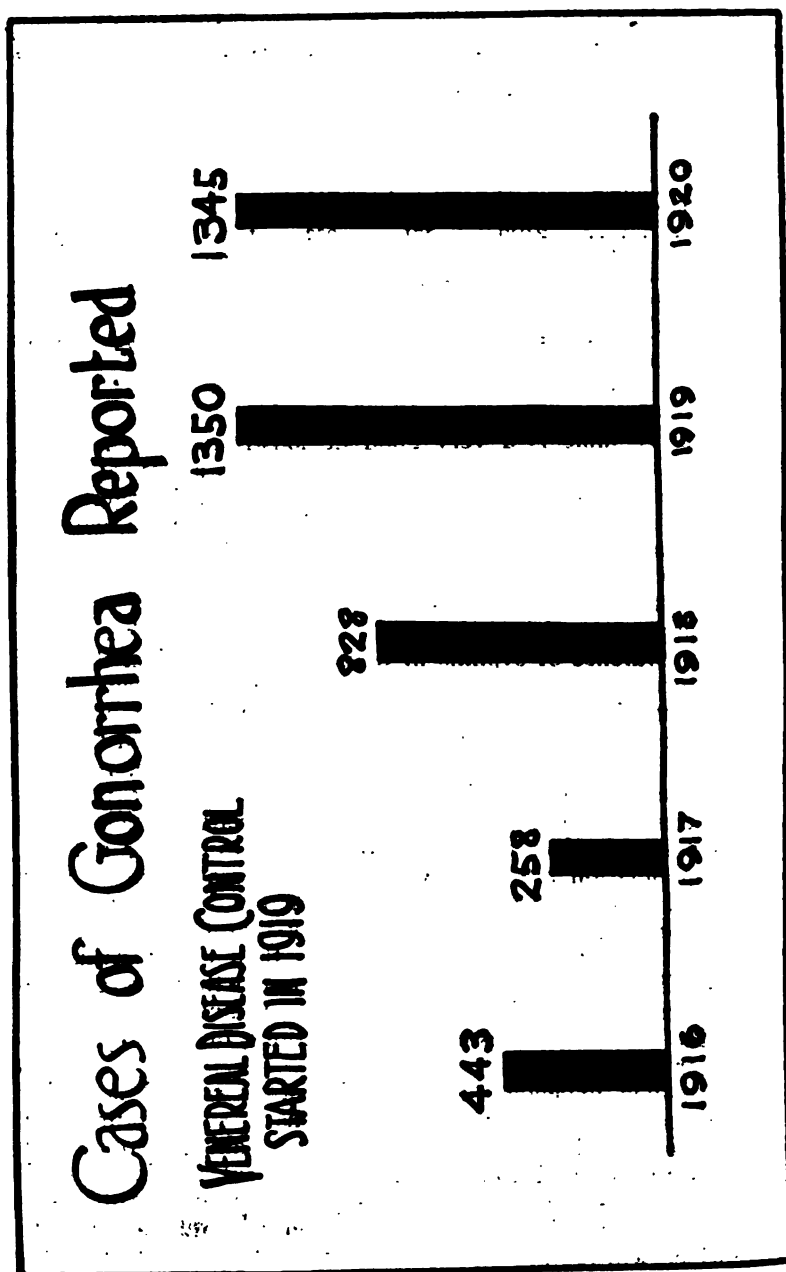
	Conn.	Wash.	W. Va.	Nebr.	Ark.	Md.
Population	1,380,585	1,356,316	1,463,610	1,295,502	1,750,995	1,449,610
Number of Clinics	9	4	11	9	4	13
Patients Treated at Clinics	2,046	871	932	1,496	2,808	3,226
Syphilis Reported by Physicians ...	3,729	2,076	2,382	2,405	2,385	2,425
Attendance at Lectures and Motion Picture Exhibits	195,560	40,064	97,102	61,017	105,172	13,134
Pamphlets Distributed	177,607	117,924	247,431	309,912	179,234	118,250

The above table is a very good demonstration of the work done in Connecticut as compared with other states of equal populations. Although some states have expended larger sums in accomplishing their end, Connecticut by conservative management was able to produce results which exceed by far the work done in comparable states.

Having treated more cases and having more cases reported than other states does not necessarily mean that there is a greater prevalence of syphilis in Connecticut. The fact that the few lectures and exhibitions given by the Connecticut State Department of Health were arranged with the idea of bringing the subject to the largest number of persons possible and thereby educating the people in the seriousness of the disease, resulted in a greater percentage of the population which were infected seeking treatment at the free clinics, or by private physicians.

It is a known fact that the Southern states having a large colored population are affected to a much greater extent with venereal diseases, especially syphilis, than the Northern states. Notwithstanding this fact, statistics show that Connecticut has treated more patients in the free clinics than either Arkansas or West Virginia, and during the same period there were more patients treated by private physicians in Connecticut than in any of the Southern states of like populations, or in many states of greater populations.

That money expended in venereal disease control is really an investment that will bring great returns at some future date can be seen by the accompanying chart. Taking two of our State institutions and considering that 20% of the inmates of these institutions are afflicted with syphilis, one can readily see that if we control the disease so that the cases do not reach a stage which will require institutional care, in time our investment will pay.



Surveys by Bureau of Venereal Diseases

During the past year the Bureau of Venereal Diseases made a survey of the State institutions with the view to ascertaining the percentage of cases of syphilis housed in these institutions. The following institutions are making a routine examination on all patients admitted. Authoritative information gives the following percentages of infected persons on admittance:

Connecticut Reformatory	3.5%
Cheshire	
Industrial School for Girls	8.56%
Middletown	
State Hospital for Insane	26% of selected cases
Norwich	
State Hospital for Insane	20%
Middletown	
Mansfield State Training School and Hospital	—1%
Mansfield	
State Prison	18%
Wethersfield	
State Farm for Women	40%
East Lyme	

All of the above institutions are now using the most approved methods of treating these cases.

In a survey of the private and public hospitals in the State, the majority of which receive a State subsidy, it was found that only a small percentage would admit patients suffering with a venereal disease. Of the 26 hospitals circularized, it was found that only 9 would admit these cases. It seems that most of the hospital boards do not take cognizance of the fact that these people are sick and need care. They still maintain that venereal diseases are always the result of wrong-doing, which is a mistaken idea. The seriousness of this condition was brought to my attention a short time ago in a city in the southern part of the State. The local social welfare organization located a case of gonorrheal infection of the eyes in a child. This case, which really needed hospital care, was refused admission to the hospital owing to the type of infection. Fortunately, New York was nearby and arrangements were made to send the child to a hospital in that city.

Importance of Venereal Diseases

A careful, unemotional analysis of this group of loathsome diseases will certainly convince all persons, both interested and disinterested, that there is really a need for intrinsic medical measures in combating them.

There is no doubt but that reform movements and teaching of continency have a very important place in the combat, but from a public health standpoint, the most important phase is

Cost of Syphilis in Insane Institutions

20% of inmates have Syphilis

STATE HOSPITAL FOR INSANE - MIDDLETOWN
APPROPRIATION 1919-1921

20%

\$1,300,000

NORWICH STATE HOSPITAL - NORWICH
APPROPRIATION 1919-1921

20%

\$700,000

20% OF BOTH APPROPRIATIONS

\$400,000

medical treatment. If we were able to congregate every person already infected with gonorrhea and syphilis and keep them under control until they were non-infectious, in a short time these diseases would be eradicated.

The State Department of Health is interested in curing these persons because of their being a menace to the public health. The great possibility that these patients come in contact with the general public forces us to the conclusion that if the public is to be protected, then the infected persons must be treated.

Syphilis, in particular, is liable to be contracted, as every day we are open to infection at soda fountains, restaurants, laundries, etc. This disease is the master disease, the peer and indeed the superior of tuberculosis. There is not a tissue or a structure of the body which syphilis cannot affect. Sir William Osler coined the phrase which for all time expresses the relation of syphilis to medicine: "Know Syphilis in all its manifestations and relations, and all other things clinical will be added unto you."

After a careful and most conservative compilation of the statistics on deaths in Connecticut, we find syphilis the chief factor.

To arrive at the exact figures of deaths due to syphilis is not possible, as a good many physicians are loathe to report a death under that cause. Consequently, a very conservative estimate of 60% of the stillbirths of the State are included in the above estimate. This is not a report of the fancies of an alarmist, but the cold facts and figures of science.

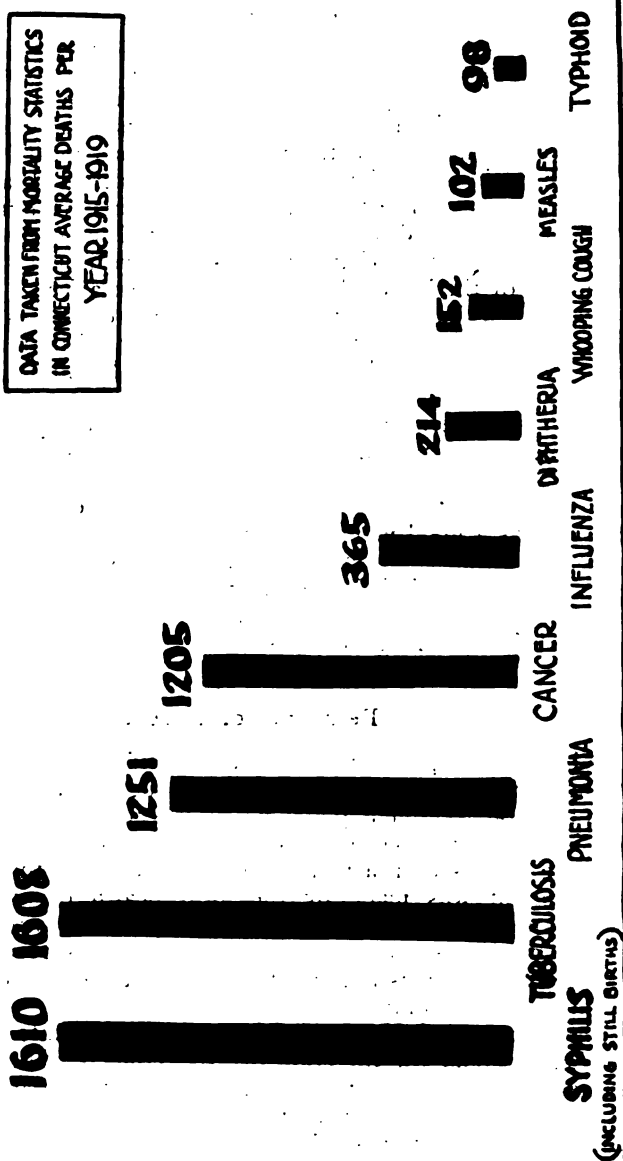
Personnel of Bureau

When the Department of Health decided to establish clinics in the various cities, the uppermost thought was to furnish the best medical treatment possible. In every city, one of the best physicians obtainable was secured as Director and in every instance he has been a man who is an expert in this line. This appointment was made by the local health department, as a physician best known in his own community. If one considers the fees which these doctors receive in their private practice, it is but fair to admit that the cost of treatment of these cases is only nominal.

The Bureau of Venereal Diseases of the State Department of Health under the direction of Dr. Daniel E. Shea, each year answers thousands of requests for information regarding these diseases, as well as for literature pertaining to them. When requested, the Bureau sends lecturers to clubs and other organizations throughout the State to talk on any subject pertaining to sex education. Medicinal agents and consultation services

SYPHILIS IS THE GREATEST KILLING DISEASE

DATA TAKEN FROM MORTALITY STATISTICS
IN CONNECTICUT AVERAGE DEATHS PER
YEAR 1915-1919



are furnished to the State institutions when requested. In some cases where the cost of salvarsan was prohibitive, this product was distributed in a manner similar to that used in procuring antitoxin.

Conclusion

There are a few obstacles in the way of successfully carrying out a venereal disease control program, but none that in my opinion are of sufficient magnitude to discourage the optimistic—much less justify the entertaining of any thought of abandoning the work.

The enormous number of cases treated at the State clinics and large number reported by physicians, is a sufficient index to the prevalence of venereal diseases throughout the State. The annual toll in loss of life; the money spent in treatment; the economic loss measured in terms of time and lowered efficiency, as well as the added burden of taxation necessary for the support of inmates in our public institutions who are there as the results of venereal diseases, are of sufficient magnitude to cause a continuance of this great work.

DANIEL E. SHEA, M.D.,

Director, Bureau of Venereal Diseases.

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**FIRST AND SECOND REPORT OF THE
INDUSTRIAL WASTES BOARD**

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REPORT OF THE INDUSTRIAL WASTES BOARD

1918

His Excellency, the Governor, State Capitol, Hartford, Connecticut.

Sir:—The Legislature of 1915 imposed upon the State Department of Health the duty of furnishing information and assistance in ascertaining or installing sewerage systems and refuse disposal plants.

Sec. 2561. Information Furnished by Department. The Department of Health on request of any person, corporation or municipality, shall furnish such person, corporation or municipality such information and assistance as may be reasonably necessary in ascertaining or installing the most practicable sewerage system or refuse disposal plant.

It being ascertained that the carrying out of the provisions of this Act would involve large interests and many difficult problems, the Legislature of 1917 made provision for an Advisory Board to aid and assist the Department of Health in this work.

Sec. 2562. Assistance in Carrying out Preceding Section. The State Department of Health, acting with five persons appointed by the governor at least two of whom shall be of recognized experience in sanitation, and at least two of whom shall be manufacturers, is authorized to make such investigations and employ such expert assistance as may be necessary to enable it to carry out the provisions of Section 2561, concerning pollution of the waters of this state. The persons so appointed shall serve without compensation. For the purposes of this section the sum of twenty-five thousand dollars is appropriated out of any money in the treasury not otherwise appropriated.

The personnel of this Board as organized in accordance with this Act is as follows:

Commissioner of Health—John T. Black, M.D.

Public Health Council—Edward K. Root, M.D., James A. Newlands, B.S., Robert A. Cairns, C.E., Lewis Sperry, C.-E. A. Winslow, M.S., Walter H. Brown, M.D.

Special Appointive Members—Henry R. Buck, John H. Goss, Ernest W. Christ, Arthur M. Waitt, G. Clifford Foote.

The first meeting of this Board was held on July 13, 1917, at which time organization was perfected by selecting the Chairman and Secretary of the Public Health Council as Chairman and Secretary of this Board.

The full Board has had seven meetings during the interval covered by this report. Numerous committee meetings and conferences have been held.

NAME

The Act creating this Board did not designate a specific title for it and such being deemed necessary for the purpose of identifying its activities, it was voted that it should hereafter be known as "The Industrial Wastes Board."

PROCEDURE

It was decided that meetings of the Board should be held at such times and places as might be designated by the Commissioner of Health, or upon the request of at least four members of the Board, and that the accounting and expenditure of all moneys be incorporated with the financial system of the State Department of Health, but that the expenditures incurred under the authority granted in this Act should be so classified that they might be presented separately to this Board for approval.

It was agreed that all matters referred to the State Department of Health under the provisions of Section 2561 should be submitted to this Board for its consideration.

POLICY

It being the general impression that the Industrial Wastes Board was created for the particular purpose of studying the problems relating to stream pollution by industries, it was by vote decided that only such problems as referred to conditions resulting from industrial wastes should be taken up, all others to be referred back to the State Department of Health for disposition.

After careful consideration it was decided that with a few exceptions, it would be advantageous to take up the study of stream pollution along two general lines:

1. The study of wastes by classes, using one or more industries of a particular class for intensive study and experimentation, with the idea that the solution of the problems surrounding any particular class of wastes could be applied with slight modification to all industries of that class within the state.
2. The study of certain areas or watersheds which are now grossly polluted, for the purpose of determining satisfactory methods of relief other than by the treatment of specific wastes at their sources.

As this report will indicate, it is the opinion of the Board that more satisfactory results will be obtained by following out the former plan because it has been found that many wastes which have been polluting the streams can be reclaimed at a profit. Studies for the reclamation or economic disposal of wastes have been made by certain manufacturers in the State. They have

spent large sums of money, solved some problems and partially solved others. These manufacturers have willingly coöperated with this Board and have made available the information gained by their previous experience. They have also, at considerable expense of their own, participated in the investigations made by this Board. This coöperation and assistance by the manufacturers of the State has done much toward making the work a success.

Up to the date of this report, the Board has taken up the following classes of wastes: brass and copper, iron, silk and silk dyes, wood distillation.

The brass and copper wastes have been studied particularly in Waterbury and Stamford, under the direction of Mr. James A. Newlands; the iron wastes in New Britain and Bristol, under the direction of Mr. J. Frederick Jackson and Mr. James A. Newlands; the silk and silk wax in South Manchester under the direction of Arthur D. Little, Inc., of Boston, and the wood distillation in North Canaan, under the direction of Mr. Jackson.

Under the second group, the investigation of areas or watersheds surrounding the Naugatuck and Hockanum Rivers was undertaken. The condition of the Naugatuck River has been the cause of numerous complaints for many years, and it was decided to study this problem along the lines inaugurated by Mr. Charles A. Preston, Engineer for the Manufacturers' Committee of Waterbury. This required a general survey of the industries and municipalities and of the watershed, the object being to determine whether the insanitary condition of the river could be alleviated by providing an increased and uniform stream flow.

The study of the Hockanum River watershed was taken up along somewhat similar lines and included the consideration of the Rockville and South Manchester sewage disposal works.

Other problems which have received the attention of the Board but which are not included in the two groups mentioned are as follows:

NOROTON RIVER. Pollution by oil and other wastes from the Stamford Rolling Mills plant at Springdale. The discharge of wastes by this concern into the stream has been entirely discontinued. The oil is now recovered with profit, but the other waste problem will require further study.

NORWALK RIVER. Pollution by iron wastes from Georgetown Mills. Investigation not completed, although conditions on river are reported improved.

NORTH CANAAN WATER SUPPLY. Polluted by discharge from Connecticut Chemical Company at East Canaan. Discharge into the river discontinued. Study of the wastes as a class being undertaken.

"MAD RIVER. An inspection was made at the request of the Scovill Manufacturing Company. Condition of river reported good, except near its discharge into the Naugatuck. No action taken pending the solution of the Naugatuck problem.

THAMES RIVER. Threatened pollution by Shay Fertilizer Company. Plans were submitted for disposal of wastes but were disapproved. Plant not constructed.

MIANUS RIVER. Pollution by Mianus Manufacturing Company. Company now constructing filter beds for relieving this stream.

LYDALL'S BROOK. Pollution by paper factory in Manchester. No action taken other than investigation as it is contemplated making a special study of this class of wastes.

TOMAC COVE. Pollution by Stamford Rolling Mills. Pollution discontinued by installation of settling basins.

STAMFORD HARBOR. Pollution by Edgemoor Arsenal. Investigation elicited the fact that the pollution would be temporary and that war work would be interfered with, if abatement was ordered, consequently no action taken.

BYRAM RIVER. Pollution by American Felt Company at Glenville. Disposal plant installed which eliminated the pollution, plans of which were filed with this Department.

FIVE MILE RIVER. Threatened pollution at Rowayton by the Union Aniline Dye and Chemical Company. Company promised to install satisfactory disposal tank although later the construction of the factory was abandoned.

The appropriation for the work of this Board was \$25,000. Of this amount \$12,113.73 was expended up to September 30, 1918. The balance will complete the study of some of the problems now under way, but there are many new problems arising which should receive consideration, and it is therefore recommended that the appropriation for the next period be increased to \$50,000, to be made available July 1, 1919.

Reports in detail are appended thereto, covering the studies and investigations listed under groups one and two.

Respectfully submitted,

(Signed) JOHN T. BLACK, *Chairman*.

Approved at a meeting of the Industrial Wastes Board, January 28, 1919.

(Signed) E. K. ROOT, *Secretary*.

REPORT OF THE INDUSTRIAL WASTES BOARD

1920

His Excellency, The Governor, State Capitol, Hartford, Connecticut.

Sir:—We have the honor to submit a report of the activities of the Industrial Wastes Board for the fiscal period ending June 30, 1920, this being the second biennial report of this commission.

The 1918 report outlined in detail the policy and methods of procedure adopted by this commission for studying and determining the most efficient and economical means for removing pollution from the streams of the state. It may be recalled that two methods of approaching these problems were being tried out at the time of our last report:

1. Classification of wastes and the selection of a typical industry of each class for the intensive study of its wastes, to determine practical methods for the removal of objectionable materials.
2. Consideration of streams now grossly polluted to determine the advisability of applying relief measures other than the treatment of waste before its discharge into the stream.

Our last report indicated progress in certain studies carried out in accordance with the above plan. We are at this time able to submit final reports on all problems except that of the New Britain sewage experiment station.

Research work is exacting and tedious under the most favorable circumstances, and with unsettled labor conditions and difficulty in securing and retaining skilled personnel, none of the studies have progressed as rapidly as might be desired.

Reports on the Naugatuck River, Hockanum River, Lydall Brook, brass and iron wastes, silk wastes, South Manchester and New Britain sewage disposal, are appended.

The results so far obtained have led to the following general conclusions:

1. That the economic value of a stream is greatly reduced or destroyed by gross pollution.
2. That while stream and harbor pollution has seriously damaged the shellfish industry in certain localities, natural causes are to some extent responsible for the destruction of shellfish in Connecticut waters.
3. That dilution sufficient to insure satisfactory conditions can not be secured on the streams studied by regulation of stream flow.
4. That domestic and industrial wastes should have their

objectionable qualities removed before being discharged into the stream.

5. That standards of permissible pollution should be established at various points.

6. That in removing objectionable materials from the wastes of industries of nearly every class, sufficient valuable materials may be recovered to make the cost of removal reasonable and in some cases profitable.

7. That every effort should be made to prevent additional pollution of streams.

8. That the problem of diminishing the pollution of streams in Connecticut should be approached in a systematic manner, guarding those streams which are not as yet seriously affected, and at the same time eliminating instances of gross pollution as fast as possible.

9. That even with the work earnestly prosecuted it will be many years before all streams can be restored to a reasonably satisfactory condition.

RECOMMENDATIONS

It is recommended that the work of the Commission be continued along present lines and that an appropriation of \$30,000 per annum be made for this purpose.

Respectfully submitted,

(Signed) JOHN T. BLACK, *Chairman*.

Approved at a meeting of the Industrial Wastes Board,
December 10, 1920.

(Signed) E. K. Root, *Secretary*.

MEETINGS OF THE INDUSTRIAL WASTES BOARD

DECEMBER 19, 1918

The sixth regular meeting of the Industrial Wastes Board was held in Room 13, State Capitol, Thursday, December 19, 1918.

Present: Messrs. Christ, Waitt, Goss, Foote, Cairns and Newlands, Drs. Winslow, Root and Brown, and the Commissioner.

Financial Statement. The financial statement for the year ending September 30, 1918, was submitted by the Commissioner with the statement that the expenditures had been approved by the Auditor, Mr. Newlands, and had been presented quarterly to the Public Health Council.

Appropriation	\$25,000.00
Expenditures	12,113.73
Balance	\$12,886.27

It was

Voted: That the Financial Statement as submitted be accepted and ordered on file.

Mr. Goss inquired how much money had been contributed by manufacturers, to which Mr. Jackson replied that about \$1,300 was collected and about \$800 had been expended, which was not included in the statement just submitted.

Appointments. The Commissioner reported that appointments had been made during the summer and regularly approved in accordance with the instructions of the Board. Appointments made, with salaries, are as follows: Stuart J. Wasley, Engineer on Industrial Wastes, \$100 per month; Charles E. Rogers, part-time, \$5 per day; Louis A. Julianelle, Assistant Bacteriologist, Industrial Wastes, \$100 per month.

The resignation of Mr. Herbert C. Elton, assistant engineer, was announced, Mr. Elton having resigned to accept a more lucrative position. It was

Voted: That the appointments as submitted be approved.

Fish and Game Commission. Commissioner Crampton at this point was invited to address the Commission, and he spoke concerning the effect of stream pollution upon the fish and shellfish in the State. He stated that he appreciated the work which was being done by the Board, and that his Commission would be glad to coöperate in any way possible.

Waterbury Manufacturers' Committee. Mr. Goss, who was appointed to take up the consideration of the petition of this association and the proposal of Mr. Preston, reported that he did not see how this Board could take over the work which this Committee had been carrying on with the funds allotted. However,

every effort should be made to coördinate the work of this Board with the investigations of the Committee. This would save the checking up of their work which would have to be done if the work is carried on independently. After considerable discussion, it was the opinion of the Board that it could not participate in the proposal to secure a special appropriation for the surveys of the watershed of Lead Mine Brook until the appropriation for the Board had been decided by the Legislature.

Assistance to New Britain. Mr. Christ brought up the question of financial assistance in solving New Britain's sewage disposal problem, and it was agreed that municipalities should be assisted on practically the same basis as that on which factories had been assisted in the past. A suggestion was made that a 50/50 proposition would be fair, but after further discussion, it was

Voted: That no definite proportion of expense to be borne by the Industrial Wastes Board in solving any particular problem should be determined at this time.

Status of the Industrial Wastes Board. The question arose as to whether this Commission was temporary or permanent, and it was decided to refer the matter to the Attorney General, who gave the opinion that the Board would function so long as funds were available for carrying on the work.

General Discussion. A general discussion of the various phases of the reports as submitted then ensued, without particular action on any subject.

The meeting then adjourned.

(Signed) E. K. Root, *Secretary.*

JANUARY 28, 1919

The seventh regular meeting of the Industrial Wastes Board was held in Room 11, State Capitol, Hartford, January 28, 1919.

Present: Messrs. Christ, Foote, Goss, Buck, Newlands, Cairns, Dr. Root and the Commissioner.

Mr. John M. Crampton, Superintendent of the State Board of Fisheries and Game, was invited to be present and attended the meeting.

Reports. Report of the Special Committee to Consider the Budget was given by Mr. Cairns. He stated it seemed to the Committee that there could be no question as to the wisdom of continuing the Industrial Wastes Board and its work. Since the Board was delayed in starting its investigations, it would not be possible to submit to the Legislature anything more than a progress report, and if the work is not continued, the money already spent will practically be lost. The Committee recommended that an appropriation of \$50,000 be asked for to continue

this work, and it was suggested that the Legislature be approached for this sum by a special bill. The report of the Committee was accepted, and the Commissioner instructed to draft such a bill.

Mr. Jackson read an abstract of his report on the Naugatuck River investigation which lead to a discussion of the proposed water conservation project. This discussion brought out the opinion that the advantages gained by treating the sewage of the Valley by the proposed dilution would not be sufficient to cover the cost of storing some 2,000,000,000 cubic feet of water. It was agreed, however, that such dilution would partially relieve the municipalities in the Naugatuck Valley of sewage disposal, and this being the case, the investigation should continue until more definite data could be obtained.

Report of the Industrial Wastes Board. Reports of the Commissioner, Mr. Jackson, Mr. Newlands and Arthur D. Little, Inc., were submitted for consideration. A few changes were suggested, after which the reports were approved and the Commissioner instructed to prepare them for submission to the Governor.

Correspondence. A letter from the Connecticut Oyster Growers' Association with an enclosure from the Connecticut Shellfish Commission protesting against the installation of the Aniline Dye and Chemical Company at Rowayton and its intention to discharge chemical wastes into the Five Mile River were read. Mr. Jackson stated that this matter had been investigated; that the Company's plant was merely proposed and it looked now as if it would never be built. Consideration of this matter was deferred, awaiting developments.

Letters from the Scovill Manufacturing Company, with one from Mr. Charles H. Preston, also letter of Charles A. Ferry, relative to the Naugatuck Valley investigation, were submitted. A petition on the same subject from the Waterbury Manufacturers' Committee, endorsed by Lewis A. Platt, Chairman, was also presented. These were all discussed, and Mr. Goss was instructed to take the matter up personally with all concerned.

Reports. The Commissioner submitted a brief report of the general activities during the last few months. Mr. Jackson reported on the Naugatuck and Hockanum River work, and Mr. Newlands on the investigation of brass and iron wastes in Waterbury and Stamford.

Consideration of the contract with Arthur D. Little, Inc., was taken up and it was decided that it should not be renewed and that final payment on this contract should await the submission of a final report from the Little Company, in accordance with the terms of the contract. It was then

Voted: That the contract with Arthur D. Little, Inc., should not be renewed, and that this Department should take up the work with the facilities at their command.

Industrial Wastes Board Report. Mr. Jackson stated that in compiling his report for the Commission to submit to the General Assembly, he found considerable information which he thought should be held as confidential, and asked for instructions. It was decided that such information as was not essential and which would be likely to reveal business secrets should be withheld.

Budget. The Commissioner reported he had stated to the Finance Board that a Budget of not less than \$30,000 would be necessary to continue the Industrial Wastes work for the next two years without increasing the work, and if the Board decided to enlarge the work, a larger sum would have to be appropriated. After a thorough discussion of the Budget, it was

Voted: That a Committee consisting of Messrs. Newlands and Jackson and the Commissioner should consider the Budget and report at the next meeting.

Dr. Winslow suggested that a list of all complaints referred to this Board and what action had been taken on them be incorporated in the Annual Report.

There being no further business, the meeting then adjourned.

Attest:

(Signed) E. K. Root, *Secretary.*

JUNE 13, 1919

The eighth regular meeting of the Industrial Wastes Board was held in Room 13, State Capitol, Hartford, June 13, 1919.

Present: Messrs. Waitt, Christ and Cairns, Drs. Root and Winslow and the Commissioner.

Finances. A statement of finances for the quarter ending March 31, was submitted and approved.

Expenditures for quarter ending March 31	\$ 4,773.93
Total expenditures to date	22,476.74
Amount available on old appropriation	2,523.26

Appointments. The appointment of Frank Bachmann, chemist, to take the place of Mr. Mohlmann who has resigned, was offered for the approval of the Board. Mr. Bachmann is to receive a salary of \$2,400 to start, and \$2,500 before the first of the year if his services prove satisfactory. It was

Voted: That the appointment of Frank Bachmann at \$2,400 a year, with an increase to \$2,500 before the first of the year be approved. (Corrected October 3, 1919.)

Engineering Report. Mr. Jackson reported on the following matters:

Union Aniline Dye and Chemical Company's plant at Rowayton. Former complaints filed against this Company were investigated but no action taken as the Company had abandoned plant.

Recently, the construction of the plant has been continued and additional complaints have been filed. Company has agreed to file plans for disposal of wastes and to clean up premises. Dr. Tracey has been notified and asked to report if orders have not been complied with.

Emery Wheel Plant at Meriden. Complaints regarding dust and odors from this plant were investigated and orders issued for the installation of dust arresters and other apparatus to eliminate conditions complained of.

Aluminum Smelting Company at Hamden. Informal complaint has been made regarding the emission of smoke and vapors from this plant, but no investigation has been made as we have been assured that a formal written complaint will be sent in as required by law.

A. D. Little, Inc., contract. This Company has filed its final report and has been paid in full as per agreement. The report, however, did not contain copies of analyses as has been requested.

Public Utilities Commission. The Secretary of the Public Utilities Commission has informed the Commissioner that a conference was desired with the Industrial Wastes Board on the question of cooperating in a general survey. No call for a meeting has been received as yet.

U. S. Geological Survey Cooperation. As this department of the Federal Government has been doing more or less work in other states in cooperation with special agencies, a request was made that such cooperation be extended to this State. After several conferences, an arrangement was made, subject to the approval of the Board, for the measurement of certain streams in this State at a cost not to exceed \$4,000, \$2,000 of which is to be paid by the State. The Survey will install their own gauges, supervise them, compile records and do the printing; the State will install apparatus, provide for operation of same and pay the expenses of the supervising agent. It was

Voted: That this Board cooperate with the U. S. Geological Survey to the extent of appropriating \$2,000 a year for stream gauging under the conditions stated.

Naugatuck River Problem. This problem has resolved itself into the question of determining the amount and character of domestic and industrial wastes. The ultimate solution, it is believed, would be that of recommending treatment of the various wastes at the industries or at the outfall of the sewers, thereby relieving the stream of the grosser industrial wastes. It was

Voted: That \$3,000 be applied to the continuance of the work on the Naugatuck River.

A further discussion of the Naugatuck Valley brought out the opinion that the analyses and stream gauging, except the

check gauging which will be done in coöperation with the U. S. Geological Survey, had gone far enough to show the general character of the stream.

Hockanum River. This work is being continued by visiting the factories and determining the character and amount of wastes. All gauges have been removed.

Manchester Sewer Beds and Cheney Bros. Mill. The study of this problem as carried on by the Little Company did not furnish much information of value. What little work was done was by coagulation or chemical precipitation. It is thought that the fatty acids reclaimed by this process would pay the expenses of operating the plant. It was suggested that this work be continued under the supervision of the Department of Health, possibly using the Little Company in the capacity of consultants. The experimental plant is not being operated at the present time.

Lydall Brook, Manchester. It is believed that an intensive study of Lydall's Brook would be most satisfactory as this little stream presents various phases of the stream pollution problem. The results of investigations on this stream may be secured early so that it will be possible to use it as an example of what can be accomplished in cleaning up other small streams of the State. It was estimated that the cost of this investigation would approximate \$1,000. It was

Voted: That \$1,000 be applied for the study of Lydall Brook and \$4,000 for the Hockanum River and Manchester sewer beds.

New Britain Sewer Beds. Plans for an experimental station have been made and are to be submitted to the New Britain city officials for the purpose of securing an adjustment as to the distribution of the expense of carrying on the proposed experimental work. Mr. Christ thought a definite program should be decided upon and submitted in writing. The money he thought could be secured partially from this Board, partially from the manufacturers in New Britain and partially from the city. He also thought that there might be some apparatus and tanks in New Britain which could be secured at low cost. Mr. Christ suggested that a definite program be worked out in conference with the New Britain authorities and presented at a meeting of the Board which should be held preferably within the next sixty days. It was

Voted: That a definite plan for an experimental plant and its operation be prepared and, after conference with the New Britain officials, it should be submitted at the next meeting of the Board.

Connecticut Chemical Company, East Canaan. No nuisance exists at the present time as the plant is not operating.

Brass and Copper investigation. Mr. Newlands, who has been supervising the study of brass and copper wastes at Stamford and Waterbury, was not present. The Commissioner said he

believed this work would require about as much money as was appropriated last year. It was

Voted: That \$3,000 for one year be applied to the work of studying brass and copper wastes under Mr. Newlands' supervision.

The Commissioner stated that the allotment for the various problems so far totaled \$13,000. To this should be added \$2,000 for minor investigations and overhead, leaving \$10,000 for the New Britain problem and all others the Board might desire to take up.

There being no further business, the meeting then adjourned.

(Signed) E. K. Root, *Secretary*.

OCTOBER 3, 1919

The ninth regular meeting of the Industrial Wastes Board was held in Room 11, State Capitol, Hartford, October 3, 1919.

Present: Messrs. Foote, Christ, Goss, Newlands, Cairns, Dr. Root and the Commissioner.

Minutes. The vote on salary of Mr. Bachmann, contained in the minutes of the previous meeting, was corrected to read as follows:

Voted: That the appointment of Frank Bachmann at \$2,500 a year with an increase at the first of the year, be approved.

Minutes were read with this correction.

Financial Statement. Expenditures for the quarter ending June 30, 1919, amounted to \$4,303.64, but as this amount exceeded the appropriation of \$25,000 by \$1,780.38, sufficient vouchers will have to be taken from this account and applied to the new appropriation to avoid an overdraft.

Appointments. The following appointments have been approved by the Council and were submitted for the approval of this Board: Helen Floyd, Stenographer and Laboratory Assistant, \$600; Louis Julianelle, reemployed September 22, \$1,500. A proposed increase of ten per cent. in salary of N. J. Thompson was submitted for approval. On motion of Mr. Newlands, it was

Voted: To increase the salary of N. J. Thompson from \$2,400 to \$2,600.

The following changes in the staff of the Engineering Laboratory have been made: S. J. Wasley transferred to Hartford Office to take charge of the experimental plant at South Manchester; A. H. Lohman has resigned and his place has not yet been filled; H. C. Diehl resigned September 30.

Correspondence. Letter from Charles E. Wheeler, Manager of the Connecticut Oyster Farms Company, re protection of shellfish supply from pollution by sewage, was read. Discussion

of this letter brought out the suggestion that it might be wise to make a special study of the conditions surrounding shellfish areas along the shore. The question was laid on the table for further consideration later in the meeting.

Lead Mine Brook. Letter from Mr. Goss enclosing letter from Mr. Charles H. Preston relative to securing a subscription from the Industrial Wastes Board appropriation for the advancement of his work on Lead Mine Brook was read. In the opinion of the Board, funds could not legally be advanced for this purpose, and it was suggested that the Commissioner address Mr. Preston to that effect, stating that such assistance and coöperation as could be given would be rendered.

Engineering Report. Mr. Jackson read the quarterly report of the Engineering Bureau covering the period from the last meeting of the Board to date, summarized as follows:

U. S. Geological Survey. Agreement with the U. S. Geological Survey has been completed and a permanent recorder installed on the Naugatuck River, also one on the Hockanum above Burnside.

Cheney Bros. Experimental Plant. The experimental plant is in operation and treatment with lime is being tried out. Arrangements with the Door Company have been completed whereby they will install a Door "thickener" and operate it for a certain period to ascertain what effect it will have on these wastes.

Norwalk River. Mr. Jackson read detailed report of inspection of conditions on Norwalk River and of certain analyses which had been made of the waters of this stream, as result of a complaint. This investigation was superficial and was made for the purpose of reporting to the Board in order to get its decision as to what action should be taken. Owing to the lack of available funds, it was decided that no intensive work should be done on this river, although it was felt that more information should be secured from the three industries responsible for the grosser pollution. (See detailed report.)

Whetstone Brook. Complaint having been received that cattle had been killed by drinking water from Whetstone Brook, Danielson, investigation was made which revealed the fact that even less material was being discharged now from the two factories located on this stream than formerly. Cattle were pastured nearer the alleged point of pollution with apparently no ill effects. It was the opinion of Mr. Jackson that the death of the cattle in question could not be attributed to the pollution of the water by these mills. (See detailed report.)

Brass and Copper Investigation. Mr. Newlands reported that work is being done at the Scovill Manufacturing Company on the development of zinc carbonate from bright-dip wastes. Estimates have been made on the cost of a commercial plant to

manufacture this product, and an outline of plans has been submitted to the Scovill people for their consideration. Work at Stamford has been delayed by a strike, but will be started next week.

UNFINISHED BUSINESS

New Britain Problem. It was voted at the last meeting that a definite program for the experimental work at New Britain be prepared and after conference with the New Britain officials, be submitted at this meeting. Plans for the experimental plant were submitted by Mr. Jackson. It was decided that both city and state should submit estimates for the parts of the work they were to assume and that quarterly accounts would be submitted and compared in order to keep the work on the same basis. Statements were submitted by both city and state showing the approximate cost of the work to be about \$20,000. The City of New Britain has voted \$10,000 to carry out this work on the same basis with the Industrial Wastes Board. It was brought out that this Board had but \$10,000 available for all purposes for the balance of the fiscal year. Mr. Cairns offered the following vote:

Voted: That \$10,000 be appropriated for the New Britain experimental sewage disposal works, or so much of said sum be applied as will equal the sums expended by New Britain on the same project; \$6,000 of said sum to be drawn from the funds of the current year, and \$4,000 from those of the following year.

Discussion as to the amount and distribution of the equipment of this plant at the expiration of the agreement resulted in the opinion that the Commissioner when drawing up the agreement with the New Britain authorities should arrange, if possible, to have the discarded equipment placed at the disposal of the Industrial Wastes Board for similar purposes.

NEW BUSINESS

Investigation of Shellfish Grounds. This matter was taken from the table and discussed, it being stated that some action should be taken to demonstrate that the shellfish were being injured by industrial wastes, or to disabuse the public mind of the impression it now has. On motion of Mr. Cairns, it was

Voted: That the question as to what assistance, if any, can be given by the Industrial Wastes Board in investigating the problem of the effect upon fish and shellfish resulting from the discharge into the streams of the state of domestic sewage and industrial wastes; and what prospect there is of so improving the conditions in stream and tidal waters as to bring back fish and shellfish life to its original extent, be referred to the Health

Commissioner for consideration, with request for a report at the next meeting.

There being no further business, the meeting then adjourned.

(Signed) E. K. Root, *Secretary*.

APRIL 28, 1920

The tenth meeting of the Industrial Wastes Board was held in Room 11, State Capitol, Hartford, April 28, 1920.

Present: Messrs. Buck, Foote, Newlands, Cairns, Drs. Mansfield, Winslow and the Commissioner.

Financial Statement. Financial statement for the Industrial Wastes Board was submitted, showing expenditures as follows:

First quarter	\$6,276.32
Second quarter	4,928.71
Third quarter	4,900.39
Total expended to date	<u>\$16,105.42</u>

The financial statement was approved and ordered on file.

Engineering Report. Mr. Jackson read the report of the Engineering Bureau covering the period from the last meeting in October, 1919, to date, summarized as follows:

Lydall Brook. Preliminary preparation for measuring wastes from paper mills causing pollution has been made and a meeting held with the manufacturers at which coöperation with this Department was promised in investigating as to best methods of disposing of these particular wastes. The severe weather held up this work for a time and because of lack of help, it has not been resumed.

Hart & Hutchinson Co. of New Britain have applied for a temporary approval of their disposal system for industrial wastes, which are largely of plating matter. Temporary approval has been granted, subsequent to installation of settling tank.

Cheney Bros. Plant. Work by the Dorr people at the sewage experimental plant has been discontinued. Their report is on file and this Department is awaiting a conference with them in order to compare their findings with the results of our investigation. The plant is closed down temporarily, but this Department is now operating the large sand filters for the Cheney Company.

New Britain. All tanks are installed and it is hoped that the work may be started about May 10. A survey of the wastes now going down to the beds from the various factories on the sewerage system has been completed and report is on file.

Stafford Springs. Request for investigation of sewage disposal at Stafford Springs has been received. Preliminary investigation was made and it was found that practically all the fac-

tories are discharging both industrial wastes and domestic sewage into Furniss Brook and other brooks in the vicinity. At the time of investigation, the water in the brooks was high and there was no noticeable nuisance. This is unquestionably an industrial wastes problem.

Jewell Belting Company. This company is building a tannery on Charter Oak Avenue, West Hartford. When the site was selected and plans for building were made, assurance was given them that they could connect with the city sewer system. They now find that this cannot be done, but their factory is practically completed and question has arisen as to disposal of wastes. Preliminary inspection of site has been made and samples of wastes taken at the Trumbull Street factory and analyzed. No method of treatment has been formulated which the Department would care to recommend. This is the first instance of tannery wastes to come before the Board.

Emery Wheel Factory, South Meriden. The smoke and dust problem at this plant has not been settled. The owners have several times promised they would install proper machinery to eliminate the nuisance, but Mr. Jackson did not think this had been done and expressed doubt as to how far this was an Industrial Wastes Board problem.

Whetstone Brook. Complaint of pollution of this brook by factories up stream has been further investigated. The owner of a farm on the brook below the factories complained that his cattle had been poisoned by drinking water. Investigation showed that the possibility of wastes from the factories above affecting the water to this extent was very remote and these findings were reported to the owner of the cattle and to the health officer. Findings were not satisfactory to the owner who has instituted private suit.

Union Aniline Dye and Chemical Co., Rowayton. Dye for postage stamps was manufactured at this plant during the war. Discharge from plant polluted Five Mile River, on the banks of which is a residential community from which complaints were received in regard to pollution of the water. The owners of the plant agreed to install tanks and cesspool to take wastes out of the river. Plant is not operating at present time.

Aluminum Smelting Co., Hamden. Complaint of smoke and dust nuisance was investigated. New machinery was installed by the owners to take care of the smoke and dust, but this proved unsatisfactory. The Town of Hamden intends to institute proceedings through the County Health Officer against this Company.

Naugatuck River. Work on the Naugatuck is practically completed, but sampling of the river, at less frequent intervals, is still continued. Mr. Jackson thought this work could be discontinued very shortly, unless it was the desire of the Board to make

intensive studies; if not, he could begin to get the report into shape.

Torrington Experimental Work. Mr. Jackson read a letter under date of March 17 from C. A. Patterson, Borough Engineer of Torrington, stating that he had secured a borough appropriation of \$2,000 for an experimental sewage disposal plant and requesting the advice and assistance of this Board. Mr. Jackson thought this could be given without materially increasing the office force. After discussion it was

Voted: That this Board coöperate with Torrington insofar as its present personnel and funds permit.

Shellfish Investigation. Mr. Foote brought up the question of the effect upon shellfish life of the discharge of sewage into the waters of the State. Dr. Winslow felt that the State should make an appropriation for such an investigation from the viewpoint of the shellfish situation, rather than as an industrial wastes problem and suggested that the existing information be reviewed in this Board's report to the Legislature, with recommendations that it be taken up as an intensive study.

Brass and Copper Investigation. Mr. Newlands reported that two methods for producing zinc sulphate and zinc carbonate have been devised, but no concerns have been found to purchase. All brass industries are now putting in electric furnaces, which materially cut down the available zinc oxide. If this continues, there will be a change in the cost of producing zinc sulphate and carbonate. Some manufacturers have come to the conclusion that they can take out the major portion of copper by electrolytic means. The Chase Metal Works have under consideration an electrolytic plant, but are having difficulty in getting tanks. Stamford Rolling Mills plant is ready to operate. They expect to eliminate zinc and copper from the wash water. This plant will probably not be operated at a profit. Work has been delayed because of lack of help, but will probably be started during the coming week. Pending the commencement of this work, Mr. Thompson has been making a preliminary survey of the textile industries in the state.

The meeting then adjourned.

(Signed) E. K. Root, *Secretary.*

FINANCIAL STATEMENT

OCTOBER 1, 1918—JUNE 30, 1919*

Oct. 1, 1918	Balance available		\$12,886.27
Dec. 31, 1918	Expenditures, Fifth Quarter	\$5,589.08	
Mar. 31, 1919	Expenditures, Sixth Quarter	4,773.93	
June 30, 1919	Expenditures, Seventh Quarter	2,522.97	
		<u>\$12,885.98</u>	
June 30, 1919	Refunded to State Treasurer	29	\$12,886.27

* End of the State Fiscal Period changed from September 30 to June 30.
 Appropriation for two-year Fiscal Period 1917-1919 \$25,000.00

FINANCIAL STATEMENT

JULY 1, 1919-JUNE 30, 1920

Appropriation	for two-year Fiscal Period 1919-1921		\$50,000.00
July 1, 1919	Amount available		50,000.00
Sept. 30, 1919	Expenditures, First Quarter	\$6,276.32	
Dec. 31, 1919	Expenditures, Second Quarter	4,928.71	
Mar. 31, 1920	Expenditures, Third Quarter	4,900.39	
June 30, 1920	Expenditures, Fourth Quarter	5,459.65	
		<u>21,565.07</u>	
June 30, 1920	Balance available		\$28,434.93

INDUSTRIAL WASTES ACCOUNT

Classified by Quarters

July 1, 1919—June 30, 1920

Quarter Ending	Salaries and Wages	Travel Exp.	Auto. Pur. and Exp.	Equipment	Printing	Supplies	Telephone	Light and Power	Service	Rent and Ins.	Misc.
Sep. 30, 1919..	\$3,596.87	\$685.54	\$940.41	\$188.30	\$16.00	\$405.93	\$2.35	\$2.05	\$11.70	\$30.00	\$397.17
Dec. 30, 1919..	3,112.46	619.94	452.73	29.70	28.50	211.77	0	67.98	0	220.00	185.63
Mar. 31, 1920..	3,740.45	287.43	545.71	46.63	0	180.45	7.65	16.72	5.00	0	70.35
June 30, 1920..	3,502.16	313.59	1,187.87	43.88	48.75	112.69	13.53	14.56	0	180.00	42.62
Totals for year ending June 30, 1920	\$13,951.94	\$1,906.50	\$3,126.72	\$308.51	\$93.25	\$910.84	\$23.53	\$101.31	\$16.70	\$430.00	\$695.77

PROGRESS REPORT ON NAUGATUCK RIVER INVESTIGATION

1918

As a result of numerous complaints concerning the condition of the Naugatuck River, the Industrial Wastes Board directed that an intensive study of the river from Torrington to Ansonia be made, this study to include the plan suggested by Mr. Charles H. Preston who had been acting as Engineer for the manufacturers in the Waterbury district. This plan was based on the idea of increasing and regulating the flow of the river by the building of dams on the headwaters of the stream, and thus, by dilution, reducing or eliminating the insanitary conditions now existing. With the information and data supplied by Mr. Preston, the study of the river was undertaken to demonstrate the efficacy of this method, and to secure added detailed information regarding the character and amount of pollution.

Statistics have been compiled from the readings of automatic stream recorders, surveys, analyses of the river water and of the effluents from many factories and municipalities. Rainfall and stream flow data have been secured from comparable localities and comparative hydrographs drawn. Deposits in the river bed at various points have also been analyzed. This investigation has not been carried along far enough to permit final conclusions, other than to say that from such data as has been secured, the conclusion may be safely drawn that the construction and operation of storage reservoirs will not sufficiently improve the sanitary condition of the Naugatuck River to alone warrant the necessary expenditures. It is probable that the correct solution of this problem will be found in a combination of partial purification of domestic and factory sewage, with such increased dilution as may be secured at reasonable cost by the storage and timely release of surplus waters.

The following is a summary of the various phases of the question compiled from the reports of Messrs. Ferry and Mohlman.

STREAM FLOW

The actual discharge of the river as determined from our gaugings from June to December inclusive give us some idea of the daily variation. The period over which the gaugings extend is too short to warrant their use in any but an approximate estimate. But by comparison with records on the Croton watershed for a period of 50 years and records at the Wigwam Dam of the Waterbury water supply for 16 years and the Sud-

bury River for 40 years, we have constructed a hydrograph for each station showing the discharge for an ordinary dry year and the increased flow that would result from conservation on Lead Mine Brook, East Branch and West Branch of the River.

POLLUTION

The critical points of pollution as determined from chemical and bacteriological analysis are Station 2, below Torrington, Station 8, below Waterbury sewer outlet, Station 11, below Naugatuck, and Station 13, below Beacon Falls. It would appear that if condition of the river at all the stations were equal to that at the Lead Mine Station as shown by our analyses it probably would be unobjectionable and we have assumed this as a criterion. On this assumption we find that at Torrington we would require a dilution of 3, or an increase over the average flow of 82.7 sec. ft.: at Waterbury, 439 sec. ft.: at Naugatuck, 208 sec. ft.: at Ansonia, 73 sec. ft.

CONSERVATION

The developments of all the projects on Lead Mine Brook, Hart and Hall Brook would impound a total of 2,000,000,000 cubic feet, which, drawn down and distributed during periods of deficiency would provide an increase of 95.3 second feet at Torrington, 136.8 second feet at Lead Mine, 135.8 second feet at Waterbury, 141.4 at Naugatuck and 135.6 at Ansonia.

This would give a surplus of 3.6 second feet at Torrington, 136.8 at Lead Mine and 62.6 at Ansonia, above that necessary to take care of the wastes present in the river at those places. It would leave a deficiency of 303.2 second feet at Waterbury, and of 66.6 second feet at Naugatuck. It thus appears that the total conservation of water would render conditions unobjectionable at Torrington and Ansonia (at Lead Mine there is no nuisance under present conditions) but that there would still be nuisance at Waterbury and Naugatuck. It is practically impossible to obtain enough water to dispose of the raw sewage and trade wastes at certain critical places, as solids will be deposited in the mill ponds even with greatly reduced dilution, and the present nuisances at such places will continue. The only remedy for these conditions is the removal of the settleable solids from the sewage and trade wastes. If the domestic wastes from each community were collected and treated before discharge by screening and sedimentation, and if wastes from the factories were treated at their source, the discharge to dispose of them in an unobjectionable manner would be taking Station 8, below Waterbury, for example, 389 cubic feet. The flow from conservation

as above stated would be 281 cubic feet, which still leaves as deficiency 108 cubic feet per sec., with partial treatment of the sewage.

It is difficult to fix in dollars and cents the benefits that would be obtained by the different municipalities from improvement of the river. Unquestionably there would be a direct financial saving by eliminating the possibility of assessment of punitive damages by the courts for infringement of rights of riparian owners on the river below the sewer outlets.

ADDITIONAL STORAGE

It would be possible to increase the flow of the river further by additional storage, and seven locations suitable have been inspected, though this does not begin to cover all the available sites. No detached studies of any have been possible with the time at our disposal, but we have selected two of the most promising and make a rough estimate of the storage that would be furnished by each. To estimate the cost of their development would require detailed surveys.

Northfield Hill Brook, area watershed 5.4 square miles, estimated run-off 210,000,000 cubic feet. A dam 100 feet high and 1,000 feet long would flood about 200 acres and impound about 250,000,000 cubic feet.

Todd Hollow Brook, area of watershed 12.6 square miles, estimated run-off 490,000,000 cubic feet. Reservoir is to be connected with brook by canal 1500 feet long. Dam 70 feet high and 500 feet long would flood area of about 130 acres and impound about 200,000,000 cubic feet.

CONCLUSION

The results of our investigation to date indicates that the economics are against increasing the flow of the river by storage which would be sufficient to dispose of the raw sewage and trade wastes in an unobjectionable manner. To determine whether it is feasible to use a partial treatment for the sewage, supplementing such treatment by increased dilution from storage, would require further study of different methods and costs of sewage treatment at the several municipalities and careful surveys and estimates of the sites and cost of the proposed conservation projects.

A STUDY OF THE NAUGATUCK RIVER

1920

(SUMMARY OF FINAL REPORT)

During the three years covering the investigation of the Naugatuck River, the Industrial Wastes Board has considered many problems presented by its field and laboratory workers. It has now reviewed the final report of the engineer in charge and has formulated certain conclusions which it submits as worthy of careful consideration.

GENERAL CONDITIONS

1. The Naugatuck River is utilized extensively for industrial purposes and for the disposition of the entire sewage of the valley. It is rarely used for boating or bathing, and fish are extinct, except on the upper branches.

2. Two factors must be considered in the study of the river: first, public health and comfort; second, industrial necessity.

3. The critical points of pollution are at Torrington, Waterbury, Naugatuck and Ansonia. The relation between stream flow, population and contributing pollution, and the condition of the river shows a remarkable similarity at Torrington and Waterbury.

4. The growth of the cities and towns on the watershed has been steadily progressive, with the brass industry predominating in this development.

5. No concerted action has been taken to remedy the pollution of the river. The City of Waterbury has expended large sums in the operation of an experimental station and in the purchase and improvement of a site for sewage disposal. Some consideration has been given to the possible treatment of domestic sewage at Torrington, Watertown and other points in the valley. No disposal plants have as yet been installed.

A number of the larger industrial establishments are operating reclamation processes which partially remove polluting ingredients from their wastes.

6. Municipalities and manufacturers have shown an excellent spirit of coöperation and are anxious to participate in any movement which will correct or alleviate existing conditions at reasonable cost.

CHARACTER OF POLLUTION

1. Physical pollution is apparent to the senses of sight and

smell at many points on the stream, particularly in the warmer months. At Torrington and from Waterbury to the mouth of the river, this form of pollution is much in evidence.

In places, rubbish, refuse and garbage are dumped into the river direct, or are deposited on the banks.

Mill ponds and sluggish portions of the stream serve as sedimentation basins for the deposition of suspended solids. These accumulations decompose and are responsible for most of the odors and for certain marked changes in the bacterial flora.

The waste waters, "tailings," from the metal recovery processes are in some cases extremely high in suspended solids. These solids settle, forming banks in the river and contribute to the filling up of the mill ponds. Improved methods recently adopted have reduced the amount of such material reaching the stream and these will probably entirely eliminate this form of pollution.

2. Bacterial pollution is constant, although more pronounced during the warmer months. Critical points are as a rule found below the cities and towns discharging domestic sewage. It has been found that industrial wastes often cause a marked reduction in the bacterial count at or near the points of discharge. Further study will be necessary to determine whether the beneficial effect of certain industrial wastes can be utilized when pollution by domestic sewage is materially reduced.

3. Chemical pollution, while difficult to detect by observation, can be definitely determined as to amount and character by studies at the point of discharge. A large number of industries scattered along the stream from Torrington to Ansonia contribute to this form of pollution, although definite progress has been made in the development of processes for recovering valuable by-products from these wastes which will considerably reduce this form of pollution.

The largest volume of wastes is from the brass and iron industries which discharge metallic substances in acid solutions. The alkalinity of the river water is almost sufficient to neutralize the acids in these wastes. The relative inhibitory action upon bacteria of the component portions of these wastes has not been determined.

Waste waters from the rubber regeneration processes contain considerable acids, alkalis and excessive amounts of organic matter, while wastes from the textile industry contain appreciable amounts of organic matter.

TREATMENT BY DILUTION

1. Under present conditions, for six months of the year the ordinary stream flows of the river are insufficient to dispose of

the objectionable features of the sewage, and for at least eight months, minimum flows will not sufficiently dilute. If pollution continues to increase as it has in the past, it is doubtful whether any month of the year will sufficiently dilute by 1950.

2. Conservation of the entire yield of the watershed and thereby equalization of the stream flow throughout the entire year would still leave the average flow in the river below that required for disposal of the sewage of to-day by dilution.

3. Partial treatment of the sewage, supplemented by equalized stream flow from reserve, would improve the condition of the river, but the cost might be out of proportion to the benefits derived. Further study should be given to this point.

TREATMENT BY REMOVAL

1. Carrying a trunk sewer through the valley and discharging the sewage either into Long Island Sound or into the Housatonic River below Derby would have the following objections:

1. Probable injury to the shellfish and fish industry.
2. Pollution of bathing beaches.
3. Excessive cost of installation.
4. Diminished flow in the river.
5. It would be impracticable to construct such a trunk sewer north of Waterbury requiring special provision for the towns north of this point.

2. Pumping over or tunneling through the ridge to bring the sewage of Waterbury onto the plains at Wallingford has the following objections:

1. Excessive cost of installation and operation.
2. Diminished flow in the river.
3. Large sums already expended by Waterbury for partial development of a disposal plant would be lost.

UNIT TREATMENT

1. It will never be practicable to restore the Naugatuck River to a state even approaching its original condition as a potable stream. It must always be the main drain for a populous industrial valley and, therefore, considerably polluted. However, many of the objectionable features which now exist can be remedied by proper treatment of the wastes at their sources.

2. Considerable latitude may be exercised in selecting the type and degree of treatment best adapted to different localities. but some method of treatment should be adopted for each of the larger towns.

3. Industrial wastes should be separated into different classes

and a type of treatment determined which is best suited to each class.

4. For the reason that it is impracticable to attempt to restore the Naugatuck River to its original condition, it does not seem wise to insist on high purification of certain effluents.

CONCLUSIONS

1. It is suggested that local authorities establish lines of encroachment on both sides of the river and that filling of waste land be restricted to such lines and done under supervision and control.

2. The practice of dumping rubbish, refuse and garbage into or on the banks of the same should be discontinued.

3. Private sewers discharging into the river should be eliminated where sewerage is available; and out-houses or toilets discharging directly into the stream, or upon its banks, should be reconstructed to prevent pollution.

4. Further studies and investigations should be made with particular reference to the financial aspects of the problem, particularly as to the determination of probable costs involved in the construction and operation of sewage disposal works for the communities in the valley. These studies should include all practicable forms of sewage treatment.

5. The intensive studies of manufacturing wastes should be continued according to their several natures, keeping in mind that separation of sanitary from industrial wastes is desirable when possible. The studies of particular wastes which have been conducted by this Board and the results of which are recorded elsewhere, indicate that in almost every industry it will be possible to recover sufficient valuable by-products from the waste to make the operation profitable, at the same time lessening the pollution of the stream.

NOTE—Complete report is printed in a separate volume.

A STUDY OF THE HOCKANUM RIVER

1920

(SUMMARY)

DESCRIPTION

The Hockanum River flows through one of the most important industrial sections of the State, and the character of the water and conditions for the development of water power have caused many industries to locate in the valley. Manufacture of paper and textile products are the principal industries of the valley, and about seventy-five per cent. of the population are thus directly or indirectly engaged. The balance of the population is mostly agricultural.

POLLUTION

The practice of dumping rubbish, ashes, street sweepings and garbage upon the banks or directly into the river is quite general. The river is polluted both by domestic sewage and industrial wastes, producing objectionable conditions of unsightliness and odor. The pollution from domestic sewage consists of putrescible organic matter, suspended matter and bacteria. The pollution from the textile mills in addition to the above constituents, is highly colored by spent dye liquors which, at times, give a black color to the water. The pollution from the paper mills contains considerable amounts of suspended matter and probably a great deal of paper pulp. The number of bacteria is large and the wastes are very putrescible.

The mill ponds afford an opportunity for sedimentation, and a great deal of the pollution from these various sources settles out and forms a very putrescible sludge, the decomposition of which, in warm weather and low river flow, produces obnoxious odors.

SEWAGE DISPOSAL

Rockville, Manchester and South Manchester have had sewage disposal plants for a number of years. The Rockville and South Manchester plants were not adapted to the character of sewage treated, and the plants are of but little value in lessening the pollution of the river. The design of the Manchester plant is not in accord with modern practice. It has not been properly operated and it has but little effect on removing pollution from the river. East Hartford, the only other town of importance on the watershed, has made no attempt to treat its sewage.

CONCLUSIONS

Sewage disposal as at present practiced is ineffective to prevent nuisances.

A conserved and equalized stream flow is impractical and would not provide sufficient water for disposal by dilution.

The logical method of purifying the river is to treat the sewage and industrial wastes at or near the sources of pollution. For Rockville and South Manchester, it would appear that the method of treatment should be such as to provide clear, non-putrescible effluents. The character of effluent necessary for Manchester and East Hartford cannot be definitely determined without further investigation. It is suggested that efficient sedimentation and disinfection be first tried. If this is insufficient to eliminate nuisance, further treatment to provide satisfactory effluents should be required.

Separate treatment of the industrial wastes will be necessary, and a suggestion of what methods of treatment would be successful is indicated in the reports of the engineer of the special problems at South Manchester and Lydall Brook.

Physical pollution from rubbish, ashes, street sweepings and garbage should be removed from the river by local authorities. Lines of encroachment should be established by local ordinance and the dumping of these wastes should be confined within the lines established.

Mill ponds which are particularly offensive should be cleaned.

Note—Complete report is printed in a separate volume.

A STUDY OF LYDALL BROOK

1920

(SUMMARY)

DESCRIPTION

Lydall Brook is used almost exclusively by paper mills located on it as a source of water supply for industrial purposes. The stream is also used for the disposal of wastes from these factories and also for the disposal of sewage from the small scattered population on the watershed. In the upper reaches some ice is harvested and part of the water impounded for use by the Town of Manchester.

POLLUTION

Ashes and rubbish from the paper mills constitute the main items of physical pollution. In some instances the dumps are confined by retaining walls, but in most cases, the piles have been allowed to accumulate so as to obstruct the flow of the brook. In general, the rubbish consists of the raw stock of the paper mills, but the river is used rather indiscriminately as a dump by the abutting property owners.

The wastes from all the paper mills contain exceedingly high concentrations of polluting ingredients in the form of organic matter, suspended solids and bacteria.

The stream flow available for dilution is normally so little that at certain seasons and places, the mixed flow resembles ordinary sewage. This is confirmed by the chemical and bacteriological tests, which show that the water contains even more bacteria than many domestic sewages. For the entire distance below the initial point of discharge from the paper mills to Union Pond, the brook water is exceedingly putrescible. In the sluggish portions of the brook, in the mill ponds and in Union Pond, considerable pollution settles out, decomposes and causes disagreeable odor nuisances. Coloring matter, chemicals and suspended matter give a very turbid and highly colored appearance to the water, the color varying in intensity from a light to a very heavy reddish brown with occasional streaks of greenish gray.

MOSQUITO NUISANCE

A mosquito survey has shown that the ponds, where quiescent conditions are maintained, furnish ideal breeding places for these insects, the concentration of pollution in the ponds being relatively very high. Many of the wrigglers are present even in the rapid portions of the brook, some having been washed downstream from the breeding ponds.

CONCLUSIONS

The purification of the stream within practical limits can be best accomplished by treating the paper mill wastes and domestic sewage at or near their sources. Only intensive study and experimental work can determine the proper method of treatment for each factory. From results elsewhere, however, it would seem that sedimentation, and in particular cases, perhaps chemical precipitation, with frequent removal of the sludge, will remove most of the pollution. It is doubtful, however, if this will produce a non-putrescible effluent and subsequent filtration through sand or cinders, which are readily available, may be required.

It is quite possible that by proper treatment of the paper mill wastes, considerable paper pulp could be recovered suitable for reuse in the factories, thereby providing a source of revenue to offset the cost of treatment works.

The domestic sewage from the individual houses or mills should be first settled in digestion tanks, either septic or Imhoff tanks, and subsequently allowed to seep away through the soil from leaching chambers or sub-irrigation drain tile. If the sewage is to be discharged into the brook, the effluent from the digestion tanks should first be filtered through sand or cinder beds, well underdrained.

The removal of pollution and the rendering of the sewage and paper wastes effluents non-putrescible, will considerably improve and probably almost entirely abate the health menace from mosquitoes.

The physical pollution from ashes and rubbish could be eliminated by more careful attention to the present disposal of these wastes on the part of mill superintendents and the population on the watershed.

The proper treatment for each class of wastes can only be determined by intensive study. The mill owners have, without exception, shown a desire to do their part in cleaning up the brook, and the Department has collected much valuable data which would be very useful in determining the method of treatment and save considerable time and expense in completing the work.

Note—Complete report is printed in a separate volume.

SOUTH MANCHESTER SEWAGE DISPOSAL

1920

(SUMMARY)

NATURE OF PROBLEM

1. The sewage of about 12,000 inhabitants from South Manchester and the waste waters from the Cheney Bros. Silk Mills are collected in a common sewer and discharged into the South Branch of the Hockanum River. A sewage disposal plant, consisting of about 9 acres of sand beds, was formerly used to treat the sewage but the plant has proved inadequate and its use has been discontinued for the past few years.

The classes and estimated average amounts of sewage are as follows:

- (a) Domestic sewage from the town, 700,000 gallons per day.
- (b) Concentrated mill wastes from Cheney Bros. Silk Mills, 55,000 gallons per day.
- (c) Dilute wash waters from Cheney Bros. Silk Mills, 2,345,000 gallons per day.

Total, 3,100,000 gallons per day.

2. The volume and flow of the South Branch is such that to improve the conditions a clear and non-putrescible effluent will be required. The method of treatment should take into consideration the expenditure likely to be required by both the town and the factories and their ability to finance it.

3. Two methods of attacking the problem naturally suggest themselves:

- (a) Experiments with a view to treating the combined sewage of the town and mills.

- (b) Experiments with a view to segregating the sewage into classes and treating each class as required.

Experimental work along these lines has been done by the Arthur D. Little Co. of Boston, Mass., the Dorr Co. of New York City, and the State Department of Health.

COMBINED TREATMENT

Plain Sedimentation

1. Improvement of the combined sewage by plain sedimentation with a retention period varying from $3\frac{1}{4}$ to 7 hours per day was very poor. This process is not suitable either as a final or preliminary step in the treatment of the sewage.

2. Plain sedimentation using a Dorr thickener for continuous removal of the sludge gave practically the same results as those without using the thickener.

Sedimentation with Chemical Precipitation

1. The Arthur D. Little Company in their report of May 9, 1919, concluded as a result of their experiments that "the precipitation of the solid material is practically complete when the sewage is treated with lime and allowed to settle for at least eighteen hours in open basins and the effluent so obtained yields a clear effluent if filtered through sand." They further conclude that the sludge so obtained "contains recoverable values in sufficient amount to justify further research with the object of working out a practical method of recovery."

2. The Dorr Company in their report dated March 27, 1920, conclude that "a satisfactory effluent is obtainable from chemical dosing but at a minimum cost of \$150.00 per day for chemicals, and with no recovery values in sludge."

3. Experiments conducted by the Department indicate conclusively that lime treatment of the sewage would prove a decided failure for final treatment and would not be advisable as a preliminary step before sand filtration, as the results of sand filtration with settled sewage were but little better than those with crude sewage. The costs for the lime and the storage capacity required in settling tanks would be out of all proportion to the beneficial results obtained.

Sand Filtration without Preliminary Clarification

1. Small scale experiments of sand filtration of the raw sewage by the Dorr Company produced comparatively poor removal of suspended solids and oxygen consumed. These tests, however, were not carried far enough to judge of the efficiency of sand filtration.

2. Experiments by the State Department of Health with a small experimental sand filter dosed with raw sewage at the rate of 100,000 gals. per acre per day gave a very good effluent. After four months dosing throughout the severe winter of 1919-1920 (November 24, 1919, to March 26, 1920) the filter showed signs of severe clogging, but even under these conditions the effluent was good.

3. Experiments by the State Department of Health using the entire present disposal plant throughout May, June, July and August, 1920, led to rather inconclusive results. Dosage rates varied from 400,000 gallons per acre per day to 30,000 gallons per acre per day, producing in general very good effluents, but the beds clogged rapidly and had to be scraped on an average

of once in six weeks. When badly clogged, the filter effluents were poor. The dosing of the beds was necessarily inefficient and uneven due to the condition of the surface of the filter beds and poor grades on the inlet pipes leading to the beds. As a result of these tests, it is thought that much better results would have been produced with an even dosage rate of 100,000 gallons per acre per day although even then the beds would become clogged and would require scraping at least three or four times a year.

Sand Filtration with Preliminary Clarification

1. Although no evidence of experimental work upon sand filtration is to be found in their report of May 9, 1919, the Arthur D. Little Company conclude that "the lime treatment will remove the difficulties now experienced from clogging of the sand filters."

2. Tests by the State Department of Health have shown that sand filtration of the settled sewage after lime treatment produced a very good effluent. This was, however, but little, if any, better than the effluent produced by sand filtration of the raw sewage. The rate of operation of the sand filters was 100,000 gallons per acre per day.

3. From the similarity of results produced by plain sedimentation and sedimentation with lime treatment, it is our opinion that sand filtration of the settled sewage without would have yielded practically the same results as with chemical treatment.

Activated Sludge

1. Small scale experiments by the Dorr Company (treating in all 10 gallons of sewage) produced a very good effluent by the activated sludge method. It was, however, somewhat unsatisfactory as the effluent still showed considerable color. Filtering the effluent through sand provided further purification and removed all the color, so that the effluent was quite satisfactory.

2. Small scale experiments by the State Department of Health, treating about 6 gallons per day from March 24 to April 15, 1920, produced very good effluents for each of the two aeration periods used, 6 hours and 15 hours. The color removal was practically complete in all except the rare cases when the raw sewage was black, and even in these cases, the color in the effluent was but slight.

SEPARATE TREATMENT

Experiments

1. The Arthur D. Little Company conclude that "the removal of industrial waste should be carried out upon the combined wastes from the Cheney Mills rather than to attempt to isolate and treat separately the different classes at their sources."

2. Preliminary tests and experiments made upon the concentrated mill wastes by the State Department of Health have shown quite definitely the possibility of segregating the wastes into three general classes, two of which will require treatment, the other class being suitable for discharge into the South Branch of the Hockanum River without treatment.

The segregation would be as shown under Conclusion I, revised to read as follows:

(a) Domestic sewage from the town and objectionable dilute wash waters from the Cheney mills, 900,000 gallons per day.

(b) Concentrated mill wastes, 55,000 gallons per day.

(c) Unobjectionable dilute wash waters, 2,145,000 gallons per day.

3. Further study and experiments are required, including measurements to determine more accurately the amounts of each class of waste, before the separate treatment of wastes can be accepted as a reliable method of obtaining satisfactory effluents.

4. The preliminary tests and experiments by the State Department of Health indicate that sedimentation with coagulants will produce a thoroughly clear effluent. Treatment with lime alone will usually provide proper coagulation, but at times it may be necessary to add other coagulants such as alum or ferrous sulphate. The effluent from coagulation and sedimentation would be somewhat colored but this could probably be entirely removed by sand filtration. The sludge from lime treatment indicated promising recovery values.

5. A quite intensive survey of the mills by the State Department of Health has shown that many of the dilute wash waters are clear and colorless and apparently suitable for discharge without treatment.

6. Some of the wash waters are, however, somewhere between the dilute wash waters and concentrated wastes. These should be studied and if they require treatment, should be mixed and treated with the town sewage.

7. It is practically assured that the removal of the concentrated wastes and dilute wash waters from the town sewerage system will render the mixture of town sewage and wash waters requiring treatment easily amenable to sedimentation in digestion tanks and sand filtration. In this connection, it is very likely that the present sand filters will be of sufficient size to produce satisfactory results.

8. Subject to corroboration by further experiments the following steps will be found necessary in treating the sewage and mill wastes:

(a) *Piping arrangement in mills.* This should be so changed

as to collect all the concentrated wastes in one sewerage system, all the unobjectionable dilute wash waters in another; and the remaining wastes and sewage in the system leading to the main outfall to the present sand filters.

(b) *Concentrated wastes.* A treatment plant should be provided for these in which the wastes should be coagulated and the effluent filtered through sand. Provision should be made for removal and disposal of sludge and, if profitable, the sludge should be treated for the recovery of valuable ingredients.

(c) *Unobjectionable dilute wash waters.* These could be discharged directly into the stream.

(d) *Town sewage and objectionable wash waters.* These should be settled in digestion tanks, preferably of the two-story type, and the effluent filtered through the present sand filters.

GENERAL CONCLUSIONS

1. From experiment, the following systems have produced satisfactory effluents:

- (a) Sand filtration of crude sewage.
- (b) Sand filtration of lime and settled sewage.
- (c) Activated sludge.
- (d) Separate treatment (preliminary tests only).

2. From study of the results, it is apparent that the following systems may produce satisfactory effluents:

- (a) Sand filtration of sewage settled in Imhoff tanks.
- (b) An Imhoff sprinkling filter system.

3. From cost standpoints only two systems seem to meet the criteria of reasonable cost of construction and operation, namely sand filtration of crude sewage and separate treatment, the preliminary estimates being greatly in favor of the latter.

4. It is advisable that the investigation be continued, making a thorough study of separate treatment and continuing the experiments of filtering the crude sewage through the present filter beds.

5. No one method of treatment can be recommended at this time as likely to be successful in the final solution of the problem. Careful cost estimates of each method should be made in determining this.

NOTE—Complete report is printed in a separate volume.

SEWAGE EXPERIMENTAL STATION, NEW BRITAIN

1920

(PROGRESS REPORT)

NATURE OF PROBLEM

The present sewage disposal works are located in the Town of Berlin about one-half mile east of the main line tracks of the New York, New Haven & Hartford Railroad.

The works were built in 1904. In 1898 Samuel Gray was called in to advise the city in relation to the disposal of sewage. For some time prior to this date the discharge of raw sewage into Pipers Brook and other small streams was the cause of numerous complaints and much litigation against the city.

The Gray report discussed several alternative plans for disposal, one of which was the building of an intercepting sewer and overflow chambers to collect the sanitary sewage and treat it on sand beds in approximately the same location as at present.

He estimated the flow to be about four million gallons per day from the population of 30,000 at that date, and that in 1925 the population would be 110,000 and volume of sewage ten million gallons per day. On this basis he concluded that it would require 50 acres of filter area for the flow at that date, and 125 acres for the flow in 1925. He recommended strongly that experiments in sedimentation be made before deciding on the method of treatment.

In 1902 the contract was let for building 31 beds and the plant was put in operation some time in 1904. Considerable difficulty was experienced in operating the plant from the start, and it was generally attributed to industrial wastes from the factories clogging the beds. An addition of about 5 acres of beds did not help matters. A coöperative survey between the city officials and factory owners showed that apparently only a few of the factories, and these only at infrequent intervals, were discharging wastes into the sanitary sewers.

Conditions at the disposal plant continued to grow worse, and to relieve the complete flooding of the beds during the winter months, two large settling basins were built and used during that period. The sludge was permitted to accumulate in them, and in the spring was taken out and ploughed into the land. This again caused numerous complaints.

In 1914 the city called in George W. Fuller of New York, who investigated and reported that the clogging of the beds was undoubtedly due to iron pickling liquors entering the sanitary sewers. That in seeking a solution of the problem, the elimina-

tion of these liquors must first be considered, but that even with these taken care of, with the flow of ten million gallons per day, as determined by weir measurements June 30, July 3, 1914, and allowing for ground water, it would require 80 to 100 acres to dispose of the sewage. He considered it impracticable to restore the present beds and recommended treatment by Imhoff tanks and sprinkling filters.

In August of the same year, James A. Newlands, of the Henry Souther Engineering Co., made an investigation and reported that removal of solids by the beds was wholly mechanical with little oxidation of the organic matters. That the filters were taxed far beyond their capacity and the effluent from them putrescible and not satisfactory for discharge into the brook. He recommended ploughing over the filters and installing additional underdrains, taking care to keep the coarse material about them far enough below the surface of the filters to insure the use of the entire surface area. That the most urgent requirement was efficient preliminary sedimentation. That Imhoff tanks be first installed and the type of secondary treatment to be determined by future experiments.

On September 13, 1919, the city, through its representatives, requested the assistance of the Industrial Wastes Board. A preliminary investigation made by the Engineer confirmed previous reports on condition of beds and showed that wastes from factories were still reaching the plant. The report recommended, "that an intensive survey be made to determine what factories, if any, were contributing wastes and means to eliminate them; that the Industrial Wastes Board coöperate with the City of New Britain in building and operating a sewage experimental station to try out the effect of modern methods of sewage treatment on the New Britain sewage."

These recommendations were adopted by the Board and sampling points were established on trunk and lateral sewers from the sewage beds to a point above last factory connected with system, and analyses of samples above and below each factory made. This survey eliminated all except two probable sources as contributing industrial wastes. Further tests were made of these two places within and without the plants, and it was definitely settled that one of the large factories, at times, due to poor operation, permitted large quantities of pickle liquor to reach the sewers. Since the experimental plant has been in operation, iron has been present in the sewage constantly, and in such considerable quantities as to make the above explanation unsatisfactory. The sources contributing this iron should be investigated further by the city.

During the fall and winter of 1919, plans were made and construction started on the sewage experiment station. Con-

siderable delay was encountered in obtaining material and apparatus, and operation was not started until May 24, 1920.

One preliminary process, i. e., grit chambers and three complete processes of treatment, i. e., activated sludge, Imhoff sprinkler and Miles acid are being tested.

The station has been operated continuously since May 24, 1920, and a summary of the results obtained from each process is here given for comparison. The following criteria have been applied to each process.

1. The effluent must be clear, containing on an average less than 30 parts per million suspended solids.
2. The effluent should be non-putrescible to such an extent as to have a relative stability of at least eighty per cent.
3. The effluent should be practically free from iron.
4. The sludge from the treatment plant should be disposed of economically and without offence.
5. The cost of construction and operation of the treatment plant and the ability of the city to finance it should be given careful consideration in the selection of the process.

RAW SEWAGE

As compared with sewages of other manufacturing cities, the sewage is relatively weak and contains considerably less organic and suspended matter. Iron is constantly present and, at times, in considerable amounts. Grease and oils are present in larger quantities than would be expected from sewage of this character.

GRIT CHAMBER

The results from this process have, in general, shown that satisfactory results can be obtained. The small inlet and outlet baffles installed in the chamber hold back large quantities of grease and floating matter which may have some effect on the results from the other processes.

ACTIVATED SLUDGE PLANT

Applying the five criteria mentioned above, the following results have been obtained:

1. An effluent of satisfactory clearness has been produced, very often perfectly clear and sparkling, always colorless, and average suspended solids less than 30 parts per million under favorable operating conditions.
2. A non-putrescible effluent has been obtained, the relative stability being practically ninety-five per cent.
3. The removal of iron from the crude sewage has been excellent. The small quantities remaining in the effluent would probably be unobjectionable.

4. The problem of sludge disposal has not been satisfactorily solved, and more data on this phase of treatment is necessary. The results to date show that the sludge is not amenable to treatment on sludge drying beds. Promising results have been obtained at other places by concentrating the sludge, either in centrifuges or filter presses, and drying the sludge cake by heating. This treatment is expensive and not advisable unless sufficient recovery values are obtained to produce a profit, or at least offset the expense. Another alternative would be to treat the sludge with sulphuric acid and recover the grease and nitrogen, the latter in the form of dry and degreased sludge. The concentration of fats in the activated sludge at New Britain is high and the nitrogen concentration is also fairly high, and it is very probable that either of these methods would yield good recovery values. The treatment of sludge is one of the most important factors in sewage disposal, and it is recommended that all possible methods of treatment offering reasonable chances of success be tried before reaching a final decision on this phase of the work.

5. Cost estimates are not available because the experiments have not been run a sufficient length of time to determine the most economical operating factors.

IMHOFF SPRINKLING FILTER PLANT

With this process the following results have been obtained:

1. An effluent of satisfactory clearness has been produced, having suspended solids from the secondary sedimentation tank less than 30 parts per million under favorable operating conditions.

2. A non-putrescible effluent has been produced, the relative stability being from ninety to ninety-five per cent.

3. Removal of iron has been good. The amount still remaining in the effluent, however, may possibly be objectionable under certain conditions.

4. The sludge produced has been the characteristic Imhoff sludge and should be readily and economically treated on sludge drying beds. Recovery values would probably be small in amount.

5. Cost estimates are not available, as the experiments have not covered a sufficient period of time to determine the most economical operating factors.

MILES ACID PLANT

1. With this process clarification of the sewage has not been entirely satisfactory. This may be due to the industrial wastes, as the effluents from the night and Sunday sewages have usually been very clear.

2. No stability tests have been made, due to the interfering effect of the acid. From the slight removal of organic matter, however, it is judged that the stability would be very low, and that the effluent, upon being neutralized by mixing with the river water, would be quite putrescible.

3. The sludge produced can be dried fairly well upon ordinary sludge drying beds. Analyses suggest that very promising recovery values are possible. Sufficient work, however, has not been done to warrant final conclusions.

4. There has been practically no removal of iron. In fact, during the period from October first to November fourteenth, there was an actual increase in the iron of 2 6/10 parts per million. This is attributed to the acid attacking the iron piping in the tank. Inspection has shown the piping to be almost completely dissolved in some places.

5. Cost estimates are not available, as the most economical operating conditions for producing satisfactory results have not yet been determined.

FUTURE WORK

From the above synopsis it is apparent that a great deal of work remains to be done before any particular method of treatment for New Britain sewage can be recommended. Final conclusions based upon data covering an operating period of less than twelve months are inadvisable. Each process must be fully tested under varying operating and weather conditions to determine the factors necessary for satisfactory results. After these results have been obtained, preliminary cost estimates should be prepared.

In general the results obtained at station show that the activated sludge process will produce an effluent satisfactory in every way, but that further experiments must be made to determine the most satisfactory and economical method of sludge treatment.

The Imhoff sprinkling filter system has been operated under conditions quite different from those encountered in ordinary practice, due to the high iron content of the crude sewage. In trickling through the stone, considerable amounts of iron are precipitated, and unless the filter automatically unloads there is danger that these deposits of iron will cause such severe clogging in the filter as to render this process ineffective. Continued operation and careful observation through the winter will be necessary to finally decide this point. Up to November 15th, the operation of the filter was satisfactory, but from November 15th to 30th, after the dosing had been considerably increased, the clogging of the filter compelled the temporary shutting down of this process in order to permit the filter to rest and clean itself.

The operating schedule on the Miles acid process has not been such as to produce a satisfactory effluent. Changes in method of applying the sulphur dioxide are about completed and additional experiments will be made varying the amounts of gas and periods of contact to determine the effect of these changes.

With these factors in mind, we strongly recommend that arrangements be made to continue the operation of the experimental plant for the full twelve months ending May 31, 1921.

STUDIES OF METAL WASTES

1919

For several years past bills have been presented to the Connecticut State Legislature having in view the elimination of factory wastes from the streams of the State. The necessity for some such regulation has been recognized both by manufacturers and the public at large. In fact, certain manufacturers have, upon their own initiative, spent large sums of money and have made considerable progress in reclaiming wastes, but the work has not been carried forward as rapidly as seemed desirable. During the consideration of a drastic bill on waste disposal presented at the last session of the Legislature, coöperation between the State and Connecticut manufacturers was suggested by a Committee representing the State Manufacturers' Association, and as a result of conferences between this Committee and State Health officials, a law was enacted authorizing the State Industrial Waste Commission, composed of the State Department of Health with the addition of two manufacturers, two engineers, and one representative of the state at large, to study the problems involved in factory waste disposal and report to the next session of the Legislature. An appropriation for carrying on the investigation was granted and following the enactment of the law, a number of the manufacturers signified their willingness to coöperate with the Commission to the extent of supplying means for carrying out, in their works, practical experiments necessary for the successful development of methods for recovering valuable by-products.

The investigation covered by this report was begun in April, 1918. I am pleased also to have this opportunity to acknowledge my indebtedness to the Scovill Mfg. Co., the Chase Companies, the Stanley Works, and the Stamford Rolling Mills, for facilities for the study and the practical application for waste utilization methods which we have had under consideration. Apparatus and equipment necessary for our investigations at the works have been supplied without question. Technical assistance, both in the development of plans and their practical application, have been freely given, and in this connection the writer is especially indebted to N. Julian Thompson, Messrs. C. H. Stokesbury, J. D. Bassett, and H. M. Johnquist, of the Chase Metal Works; Messrs. Roger Sperry, Wm. B. Price, and F. S. Weiser, of the Scovill Mfg. Co.; and Mr. A. P. Meng, of the Stamford Rolling Mills.

SCOPE OF WORK

The first phase of our investigation involved a careful study of the literature on the subject and while we have been unable to find many records of methods for the utilization of ferrous and non-ferrous pickle liquors, there are numerous published reports on methods used in connection with the production of the metals referred to, which may have some application in our work, and a résumé of these with patent records likely to require consideration have been compiled by Mr. Thompson in his interim reports. These reports are on file in the office of the Commission, and cover in detail the work undertaken to date. In view of the fact that these investigations have not yet been carried to a point where definite conclusions are warranted, only an outline of the processes studied will be given here.

LINES OF INVESTIGATION

On completing our review of the literature, two lines of investigation were started. At the Chase Metal Works, Waterville, Conn., we began a study of electrolytic methods for recovering copper and zinc from sulphuric acid pickle liquors and about the same time we took up the question of bright dip pickle wastes with representatives of the Scovill Mfg. Co. at Waterbury.

After a few laboratory experiments with sulphuric acid pickle had been completed, a small but practical electrolytic plant capable of handling about 185 gallons of waste liquor was installed at the Chase Metal Works. Some minor difficulties were experienced during the early tests, but we were finally able to get satisfactory results both in copper and zinc recoveries. Our tests were made on pickle solution from works tanks which were not ordinarily emptied, the strength of the pickle being maintained by frequent additions of acid. We were able to reduce the copper content by electroplating, from an average of 15 grams to 4 grams per liter and the zinc from 25 grams to 5 grams per liter, with an equivalent recovery of sulphuric acid. After reducing the copper content to 4 grams per liter, the solution was neutralized with zinc oxide from flue dust and the remaining copper and any cadmium present were cemented out with scrap zinc. Small amounts of iron, arsenic and antimony, if present, were removed by means of manganese dioxide and powdered limestone. The zinc was then deposited electrolytically from the pure sulphate solution. Careful cost estimates indicated that copper, zinc and sulphuric acid could be recovered profitably from wastes of the concentration tested, even on the basis of pre-war metal prices. Fresh pickle solutions must be used, however, for a considerable period before the metal concentration reaches the normal found

in practice and even the accumulation of a sufficient amount of metal to warrant electrolytic treatment necessitates the use of the pickle for at least a week. It was found that during this period of concentration, approximately 15 to 20% of the copper and 30 to 40% of the zinc in the solution is carried into the stream in the form of drippings from the work.

While it was evident that the process could be made profitable in the larger plants where a cheap supply of zinc oxide from flue dust is available and where a number of pickle tanks can be treated consecutively, the method has not been advocated, as a greater improvement in the river conditions is desirable and future changes in brass melting practice are likely to reduce the present available supply of zinc oxide. Our plans were, therefore, modified in order to study methods which permit the treatment of wastes having lower concentrations of metals. Some consideration has been given to a plan involving the removal of copper by precipitation with scrap zinc, the remainder of the process to recover electrolytic zinc being the same as that previously described. This method permits the treatment of liquids with lower metal concentration but is open to the same criticism regarding available zinc oxide as noted above. With these objections to electrolytic methods in mind, our investigation turned to a study of the possibility of recovering copper as before by cementing out with scrap zinc, to be followed by evaporation of the purified wastes to produce zinc sulphate. In connection with the electrolytic method, the by-products, copper, zinc and sulphuric acid, would be used in the plant producing the waste. If the evaporation method meets our requirements, it will be necessary to find a market for the zinc sulphate, the copper recovered being in a condition to be used at the plant. Inquiries made recently indicate that a market for zinc sulphate can be found and as the equipment necessary for this process is much less expensive than that for electrolytic treatment, it should be more generally applicable in small plants. Investigations have not been completed, but results to date are sufficiently promising to warrant further study.

BRIGHT DIP WASTES

At the plant of the Scovill Mfg. Co., the treatment of bright dip liquor containing sulphuric, nitric and hydrochloric acids has been given considerable study and some progress has been made. The problem with this type of waste is especially difficult, because it cannot readily be treated by electrolytic methods and processes involving evaporation are likely to be troublesome. The copper can be recovered, as is done at the Scovill Works and other plants, by cementing out with scrap steel, but the liquid

discharged into the stream is only a little less objectionable, by reason of the fact that it contains iron sulphate instead of copper sulphate. The treatment does have the advantage, however, of practically neutralizing the free acid in the wastes and is profitable. A recent installation on which we have assisted shows a copper recovery valued at slightly over \$100 per week with a net profit estimated at about \$80 per week. More thorough purification of these wastes, however, is desirable and our work in the plant of the Scovill Mfg. Co. has involved studies of methods for concentrating the drip from the pickle tanks and treatment of the concentrated liquors. We have found that the drip can be brought to a fairly high concentration without straining the work, but the degree of metal concentration has not been definitely determined, as our investigations brought out the fact that the amounts of different acids used in the bright dip solutions have not been constant in the past and further concentration experiments have been deferred until a standard mixture for bright dip work can be developed. The use of such a mixture will undoubtedly reduce the amount of free acid now being discharged into the streams. Tests of processes for recovering the metals from these wastes are now under way and the possibility of recovering some of the nitric acid is being studied, but it is too early to give any conclusions.

WASH WATER PURIFICATION

At the Stamford Rolling Mill in Springdale, Conn., we found unusual facilities for studying the waste disposal problem. The company, because of objections on the part of property owners below the plant on the Noroton River, has installed equipment to treat all of the wash water from the works and up to date over \$40,000 has been spent for apparatus. The treatment consists of neutralizing the free acid and precipitating copper and zinc with lime. Because of objections from the property owners referred to, the company is now circulating the treated wash water through their plant continuously. As there are no returns from the sludge produced by the treatment and as the continuous use of the water builds up the calcium sulphate content to such an extent that the water mains have to be cleaned at frequent intervals, operation of the plants is very expensive and the question of disposing of the sludge is likely to be a serious one in the near future. This problem has been taken up only recently, but on the basis of a preliminary study it would seem to be possible to treat the wash water with soda ash instead of lime and produce an effluent that would not adversely affect the quality of the water for use further down the stream. This plan and others for the utilization of the metals are being given further study.

ACID IRON WASTES

The question of acid iron waste disposal has not been given as much attention as non-ferrous wastes because practical methods for the treatment of iron waste are now in use and the problem in a considerable number of cases can be solved by a study of the local conditions. For certain lines of work, electrolytic pickling has some advantages over straight acid pickling and will very materially reduce the amount of wastes produced. This is a patented process, however, and manufacturers frequently object to its adoption for that reason. The process most commonly used in plants where considerable volumes of pickle are produced consists of neutralizing the acid waste, followed by vacuum evaporation to recover iron sulphate. As the margin of profit is not high, small plants are not likely to be economical. The most serious iron waste problem to be met in Connecticut at the present time is that at New Britain and a very material improvement in the conditions there was accomplished in 1912 by the installation of an evaporating plant for producing iron sulphate at the Stanley Works. At that time the writer, in connection with a study of this problem, suggested that the other manufacturers producing acid iron wastes might arrange for their disposal at the Stanley Works plant. We have recently been informed by Mr. W. S. Rowland of that company that the plan was tried, but given up because the wastes submitted were too weak to be successfully treated. The trouble, in the writer's opinion, has not been due to the impracticability of the plan but to lack of control in its operation, and we believe that a very material improvement in the condition of the sewage filter beds of New Britain can be made by the adoption of some such scheme which will enable the manufacturers to get together and handle the waste problem without the necessity of installing a number of recovery units.

GENERAL CONCLUSIONS

The foregoing statement covers in a general way the problems taken up under the writer's direction. Our investigation of some of the processes has been carried to a point where we are warranted in stating that metals can be profitably recovered from the wastes under consideration, but the proportion of metals and acids kept out of the streams is not sufficient to warrant their adoption on the basis of the stream improvement. As further study of the problem has given promising indications for both profitable treatment and effective stream protection, it would be unwise to advocate the adoption of any definite method of treatment at the present time.

In conclusion, I desire to call your attention again to the spirit of coöperation manifested by the manufacturers wherever we have asked for information and assistance on these investigations. No one realizes more clearly the necessity for controlling the discharge of wastes polluted water from a plant further up the stream and this condition is becoming too general. The time is ripe for a successful study of the whole problem and the work should be continued to a definite conclusion.

STUDIES OF METAL WASTES

1920

At the request of the Industrial Waste Commission the writer has continued the general direction of studies of possible methods for reclamation of metal wastes now being discharged into the streams of Connecticut, and I have the honor to submit the following report covering the work to date.

The development work during the past two years has been continued as in the past. We wish also to acknowledge our indebtedness again to the Chase Companies, the Scovill Manufacturing Company, and the Stamford Rolling Mills, for their hearty cooperation in the application of methods which have been suggested as the work progressed. Valuable technical assistance, both in the development of plans and in their application, has been contributed by the above companies.

In our first report, under date of January 27, 1919, we described several methods for reclaiming wastes then under consideration, and as some of the work here recorded represents a continuation of our earlier studies, the inclusion of a brief statement covering all of the work to date may be of value to you in determining what lines of investigation should be taken up in the future.

The first work carried out at the plant of the Chase Metal Works at Waterbury, Conn., involved a study of electrolytic methods for the recovery of copper, zinc, and sulphuric acid, and on the basis of figures obtained during the operation of our experimental plant, it was evident that the process could be carried out profitably in the larger mills where a cheap supply of zinc oxide from flue dust was available. Electrolytic methods appeared especially desirable as all of the by-products could be used in the plants where they were produced. Certain conditions developed, however, which made it appear desirable at the time to try out other reclamation methods before submitting any specific recommendations. Efficient results by electrolytic methods are possible if the copper content of the waste liquor runs materially above .50% and the zinc content above approximately .8%. The concentrations normally are considerably above these figures but in leaving .5% copper and .8% zinc in the electrolyzed solution, it was found that there was still an appreciable loss of metal carried into the wash water in the form of drippings, from the work leaving the pickle baths. While electrolytic treatment would produce a marked improvement in the condition of the streams it was considered advisable to study the possibilities of other methods. After experimenting with

one or two modifications which were referred to in our original report, we made a thorough study of a method by which, after the free acid had been practically neutralized with zinc oxide or flue dust, copper was recovered by precipitation with scrap zinc followed by the production of zinc sulphate by evaporating the purified solution as is done commercially in the production of iron sulphate. This treatment allows more complete removal of the metals and our estimates on a plant handling 24,000 gallons of pickle liquor per day indicated a definite profit on the cost of installation and operation. When the investigations were started, a large supply of zinc oxide from flue dust was available. The more or less general adoption of the electric furnace for melting non-ferrous alloys, however, has so reduced the supply of zinc oxide from this source that difficulties will very likely be experienced in getting this compound for the zinc recovery phase of the work. By the use of low grade spelter in place of zinc oxide it is possible that this process could be adopted with slightly less returns than were indicated in our experiments.

In the reclamation method just described the copper recovered can be used in the plant but a market for zinc sulphate must be developed. We were unable to get definite quotations for the sale of this compound, partly because of unsettled business conditions in the past two years and in part due to the fact that we were unable to guarantee any definite rate of output to concerns interested enough to make inquiries.

During a conference on these problems, Mr. F. S. Chase signified his willingness to install an electrolytic plant for the recovery of copper as our studies had indicated that it would be practicable to remove about 65% of the copper, and we are pleased to report that this installation has now been completed. The equipment removes copper from one of the larger sets of pickle tanks in the plant, having a capacity of approximately 10,000 gallons. Estimates on the returns of the plant indicate a net profit of between nine and ten dollars per day. The possibility of showing returns on electrolytic treatment will of course depend upon local conditions as in some plants the difficulty of getting a suitable location for an electrolytic plant may result in an overhead expense for circulating pipe lines and other necessary apparatus which would materially reduce the net returns of the plant. As the method is used in a number of places throughout the United States, it cannot be looked upon as an experiment and we are confident that it can be used to advantage in a considerable number of places.

In our progress report of January, 1919, we referred to some experimental work on bright dip wastes carried out at the plant of the Scovill Manufacturing Company. During the two years covered by this report a large amount of additional work has

been done on this type of waste which is particularly difficult to handle because it contains sulphuric, nitric, and hydrochloric acids. As the bright dip pickle is used in numerous comparatively small containers located, ordinarily, in various parts of the plant, any practicable recovery method will probably involve treatment of the combined wash waters and in connection with this investigation a series of experiments were carried out to determine the maximum concentration of metals and acid in the wash water which could be obtained without staining the metal being washed.

The tests were made on wash waters showing approximately the following content as these concentrations could be obtained under practical operating conditions without adversely affecting the work.

Copper	.0507%
Zinc	.0452%
Sulphate (SO ₄)	.732%
Nitrate (NO ₃)	.327%
Chloride (Cl)	.0081%
Free acid (calc. as sulphuric)	.852%

A high grade zinc carbonate was produced by neutralizing the free acid with flue dust or skimmings, cementing out the copper with scrap zinc or low grade spelter, removing iron and certain other impurities by oxidation with chlorine and precipitating with soda ash. The purified zinc sulphate liquor was then treated with soda ash to produce zinc carbonate, which was removed in a vacuum filter and dried in a vacuum shelf drier.

On the basis of 1919 prices, Messrs. Glaze and Weiser, reporting on this subject to the Research Department of the Scovill Manufacturing Company under date of October 1, 1919, stated that "neutralization and cementation, both in the cold with flue dust, shows a net return per year for the products obtained of \$51,900. The cost of help and of steam for the drying of zinc carbonate would decrease that by 1/4 or 1/3, or to \$34,600 to \$38,900."

In a later statement summarizing a conference of the Scovill Company workers on the subject, under date of November 25, 1919, Mr. Weiser stated that "it was decided that the method worked out by Mr. Thompson was entirely feasible from a chemical standpoint and that in a commercial plant with suitable equipment the zinc loss might be slightly less than that found in the experimental plant." In the absence of definite information regarding capital and operating costs, however, he stated that it was the "sentiment of the conference that, if an adequate market could be obtained for zinc carbonate at a price of eighteen (18) cents per pound, a plant producing this material could probably be operated for a small profit after the first year. It would at least be self-supporting. The first year's operating would probably show a loss."

In view of the comparatively high returns shown in the estimates for installation and operation of the plant as indicated in Mr. Weiser's report of October 1, 1919, we are inclined to believe that any increases in cost of installation over the estimated figures are not likely to exceed the returns although it is undoubtedly a fact that the first year's cost of operation would be considerably above the normal.

There are two other phases of the problem, however, which must be given consideration. The amount of zinc from flue dust required for the treatment of these wastes on the scale then under consideration is, roughly, about ten times as much as the zinc content of the waste liquor, and the adoption of electric furnaces has so reduced the available zinc oxide that there would undoubtedly be some difficulty in getting this material. The annual output of zinc carbonate from the plant under consideration is estimated at 395,000 pounds and in case this method of treatment were adopted in all the manufacturing plants it is quite probable that the market price on zinc carbonate would be appreciably lowered and thereby affect the returns.

At the present time a number of manufacturing concerns are removing copper from this waste by treatment with scrap steel. The method produces some improvement in the character of the wastes discharged into the streams, especially in the reduction of free acid, but it is not a satisfactory procedure and suggestions covering the further study of this type of waste will be referred to in a later paragraph.

The Stamford Rolling Mills Company at Springdale, Conn., as stated in our first report, found it necessary to treat the entire wash water from their pickle tanks because manufacturers further down the stream objected to the presence of metal salts in the water. A plant put in operation before the Industrial Waste Commission took up the work, involved the precipitation of copper and zinc with lime. The by-products produced, however, had no value and the lime salts accumulating in the piping system caused numerous delays in operation.

The waste to be treated is a mixture of wash waters from the sulphuric acid pickling of brass, bichromate, cleaning of cupronickel, and cyanide cleaning of thin gauge copper, and numerous analyses show the following average results:

Copper	.0325%
Zinc	.045%
Sulphuric acid	.095%
Iron	.0035%
Nickel	.001%
Chromium	.003%

There is also in suspension small amounts of copper and zinc phosphates and cyanides.

The volume of wash water amounts to approximately 30,000 gallons per day. Before reaching the recovery plant the waters from the various sources are brought together in a mixing tank having a capacity of about 10,000 gallons. After a careful study of the local conditions and some preliminary experimental work, the following method of operation was decided upon. The copper is cemented out with scrap zinc and low grade spelter in a stationary air-agitated equipment designed by Mr. L. C. Smith, Plant Engineer of the company. The waste waters then pass through a baffled settling tank to remove copper in suspension. The liquor is oxidized with chlorine and small amounts of copper, iron, nickel, chromium, and some zinc are precipitated out of solution with caustic soda. The purified liquor then passes to a special type of settling tank or thickener which separates the precipitated impurities, giving a clear overflow containing the zinc sulphate. To this solution is added soda ash to produce basic carbonate of zinc. An excess of about 60% of soda ash over the theoretical requirement is necessary to efficiently remove the zinc. The zinc carbonate is separated in another thickener, is dewatered in a centrifugal machine, and finally dried in a steam drier.

By this process we are now able to produce a high grade of zinc carbonate, which we have found by analysis compares favorably with the product on the market. Final details on the purification steps have been completed only recently, but on the basis of an investment of approximately \$10,000 for plant equipment, the value of the copper and zinc carbonate recovered should be very considerably in excess of interest charges and operating costs of the plant.

In the development of reclamation methods for the treatment of such a complex mixture of wash waters, it was natural that numerous difficulties had to be overcome. Among other things we were troubled for a considerable period with small amounts of copper getting through to the zinc recovery stage where it discolored the zinc carbonate. This difficulty is mentioned particularly as it has been the means of bringing out another modification of the process which, we believe, will result in producing a purer effluent and may also assist in solving the bright dip waste problem. On the assumption that treatment of the waste with chlorine and caustic soda was not effective in removing the last traces of copper, Mr. Thompson suggested the use of barium sulphide instead of caustic soda in the purification stage. About this time, however, in the course of some repair work, it was learned that the trouble was due to a leak below the water level in the funnel which carries the liquid to the bottom of the first settling tank. A small amount of partially purified waste was short-circuited through the tank. With the leak repaired the

trouble disappeared. It occurred to the writer, however, that the barium sulphide might still be worth considering as a precipitant for zinc sulphate in the last stage of the process, the reaction producing lithopone instead of zinc carbonate as a by-product. Lithopone is used extensively in the manufacture of paint, as a filler for rubber goods, and in other manufacturing processes and there should, therefore, be a good market for the product. As has previously been stated, the removal of zinc in the form of carbonate from a sulphate solution requires the use of about 60% soda ash in excess of the theoretical requirement and all the sodium salts are lost in the effluent. By treatment with barium sulphide, however, there is a double precipitation producing insoluble zinc sulphide and barium sulphate and the effluent should be practically as satisfactory as the original water supply. From the standpoint of returns zinc carbonate has a greater value per pound but the weight of lithopone produced would be approximately 2.6 times that of zinc carbonate so that the total return is in favor of lithopone. The treatment shows such promise that an ample supply of barium sulphide has been ordered by the company to give it a thorough trial. The annual output of the plant, if the process is adopted, will be approximately 440,000 pounds, but as this represents only about .2% of the estimated output of lithopone in the United States, the market price should not be affected.

In the treatment of bright dip wastes the recovery of zinc in the form of lithopone may also be a profitable proposition and in view of the fact that the process will eliminate the discharge of soluble products into the stream other than comparatively small amounts of nitrates and chlorides in the form of sodium salts, further study is warranted.

Our conclusions, based on the work of the past two years, may be briefly stated as follows:

1. That while either electrolytic or chemical precipitation methods as outlined in this report for the treatment of brass pickle liquor can be operated at a profit or, under adverse conditions, at a moderate expense, definite recommendations should be deferred until other processes have been studied, as the removal of metal wastes from the streams by these methods is by no means complete.

2. That the recovery of copper alone by electrolytic treatment has been accomplished profitably and should be recommended where local conditions warrant this type of installation.

3. That the processes developed during the past two years for the purification of wash waters from pickling operations as compared with the processes for treating the stronger wastes show greater possibilities both from the standpoint of stream improvement and in returns on the necessary investment, and the writer strongly recommends further investigation along this line.

In carrying out any research a large amount of time is required to eliminate preliminary difficulties which inevitably develop and the abnormal business conditions of the past four years have not reduced the problem. With the investigation in its present stage, however, the writer is confident that if the work is continued for another two-year period results will be obtained which will fully warrant the efforts of the Commission.

In closing we wish to acknowledge again the courtesies extended to Mr. Thompson and the writer by the manufacturers who have coöperated with us in the investigations. The extensive equipment and technical assistance supplied at their expense represents very definite evidence of their interest in the problem of stream pollution and their coöperation has made possible the practical experiments which are necessary for the successful completion of such work.

REPORT ON WASTES FROM WOOD DISTILLATION

1918

As a result of a complaint alleging pollution of the Canaan Water supply by wastes from the wood distilling plant at East Canaan, a preliminary survey of the plant of the Connecticut Chemical Company was made.

The water was found to be unquestionably polluted. This pollution came from the plant of the Connecticut Chemical Company, two or three miles farther up the Blackberry River. This plant, which had been recently erected for the manufacture of charcoal and the distillation of acetic acid and wood alcohol, was discharging its wastes into the Blackberry River, and a short time prior to the complaint of the condition of the Canaan Water Supply, it was ascertained that a tank containing tar and other residue from the processes of wood distillation had collapsed, permitting gross pollution of the stream. An effort had been made to dispose of the waste by constructing seepage basins between the plant and the river, but owing to the clayey condition of the soil and the tarry consistency of the waste, these basins soon became impervious, resulting in overflow.

After a hearing held in the Town of Canaan, the pollution of the river was ordered discontinued. The Company then devised the plan of carrying the wastes in tank cars and distributing them along the railroad tracks in the vicinity. It was soon reported that certain springs and streams were again showing effects of pollution. Mr. Mohlman, our Chemist, made a survey on the 22d of May, 1918, and his report is as follows:

The conditions at this plant have been known to the State Department of Health for some time and this trip was made in order to ascertain the character of the wastes and the methods of distribution. Their product is wood alcohol and acetate of lime, obtained by the destructive distillation of hard wood. Their process produces a considerable quantity of waste liquid, which had been run directly into the Blackberry River previous to January, 1918. This waste is black and oily, and quite liquid, and has a very strong, penetrating odor of creosote. It is presumed to have been carried down the river, and by infiltration, to have entered the well from which part of the water supply of Canaan is drawn at times of heavy consumption. After investigation, the Department ordered the company to cease dumping this waste on the watershed of the Blackberry River. Until the company is able to comply with this order, and in order to minimize the nuisance as much as possible at the present time, the company has, since January 15, 1918, put the waste into a large wooden tank, built on a flat-car, carried it several hundred feet down the track, and poured it over the track embankment.

At the time of this visit, the waste had been poured out on the ground several hours previously. Approximately 6,000 gallons per day are disposed of in this way according to the superintendent of the plant. The liquid runs down the bank to a small pool about 20 feet in diameter, and very shallow, and from this finds its way through a ditch to a drain which

runs under another railway embankment about 100 feet below. On the other side of this embankment there is a large pile of slag, several hundred feet in width, and the waste evidently percolates through this slag, with the exception of that which is lost by evaporation or by absorption into the ground. Considering the oily nature of the waste and the clayey, impervious character of the soil, probably very little is lost in this way. Notwithstanding this, the outflowing waste could not be found, but inspection of the base of the slag heap indicated that it probably found its way into a stream of water which issues from the side of the heap, and which is fed by a spring at the upper side. The water did not have an oily appearance, and seemed perfectly clear, but the writer seemed to be able to detect a faint odor of creosote in it. It was very cold, which made the detection of the odor more difficult. According to the opinion of all who made the inspection, the waste had to be carried from under the slag heap by this small brook, as no other place could be found where water had been flowing out from under the heap. The brook continues down parallel to the Blackberry River for possibly a mile before discharging into it, although the distance may not be this great—it was followed only for a distance of about one-half mile. Before getting into the well it has to be carried down the Blackberry River for several miles, and has to filter through the soil between the river and the well.

The plant has another waste, which consists of the water used for cooling the stills in which the alcohol is refined. The volume of this waste is very great—at a rough estimate it must be several hundreds of thousands of gallons per day. If the stills are in good condition no odor and no waste should get into this water, but another inspection should be made of this, and samples of the waste should be collected. The old channel through which the waste used to run to the river was still quite noticeable, and seemed to be in a wet condition, probably due to recent rains.

If all of the waste is now reaching the river by leaching through the slag heap and running down the small brook, it seems as if it would be unlikely that the odor or taste of wood-oil or creosote could be detected in the well, after filtering through more than 100 feet of sandy soil. However, this may be possible as the odor and taste of creosote are very penetrating and volatile oils could be carried through the soil dissolved in the water.

In this connection a visit was made with Dr. Lee, the local Health Officer, and he stated that he believed certain intestinal disturbances which came under his observation last winter seemed to be due to the city water, and he thought the trouble was due to the water. He also stated that the taste of wood-oil was sometimes very prominent in the water, but that it varied greatly. The water company has used the supply from the well near the river quite frequently this winter, as the reservoir supply has been insufficient. He stated that no analyses of the waste were in his possession, and as far as he knew, that none had been made.

RECOMMENDATIONS

A survey should be made of the situation at the time when the waste is dumped from the car. It should be followed as carefully as possible to see whether there is any way for it to reach the river except through the slag heap and down the small brook. A series of samples should be taken and analyzed more or less completely. These samples should be taken as follows:

1. Sample of waste as discharged from the tank car.
2. Sample of waste condenser water.

3. Sample of water at spring.
4. Sample of water from small brook below slag heap.
5. Sample of water from Blackberry River above brook.
6. Sample from Blackberry River just below brook.
7. Sample from river opposite well.
8. Sample of well water.

After these samples are analyzed a better conclusion can be drawn as to the relative amounts of pollution at different points. A fairly complete analysis should be made on the wastes in order to get data on which to base recommendations for their disposal. The company is willing to do something toward taking care of the wastes, but as yet has not made any plans for taking them off the watershed of the river, as was ordered by the Department. There is a large abandoned stone quarry just below their property which is about 200 feet in diameter and 28 to 50 feet deep. This could be dammed up at one end and the wastes could be led down into the lagoon thus formed. It would be large enough to hold the wastes for many months, and the officials expressed the opinion that evaporation would take place as fast as it was added. This would probably be only a temporary makeshift, as it is doubtful whether the water would evaporate as fast as the waste was added. Artificial treatment of the waste can better be considered after it is analyzed.

Subsequent to this report, analyses were made of the water in the river and of the wastes, but no study or experiments have been undertaken for economic disposal or reclamation of any part thereof. As a result of the order forbidding the discharge of the wastes on the watershed, and the method of distribution by tank cars being unsatisfactory, a pipe line is now being constructed to carry the wastes over the mountain onto an uninhabited watershed. This, of course, is a provisional arrangement, and further investigations and analyses are being conducted to develop, if possible, a practicable method of disposal at the plant.

INFLUENZA EPIDEMIC OF 1918-1919

INFLUENZA EPIDEMIC OF 1918-1919

The great pandemic of influenza spread from Europe to this country in 1918 and Connecticut was one of the first states stricken by the disease because of its location on the Atlantic coast.

Influenza—or “Spanish Influenza,” to use the popular term—appeared in Massachusetts among sailors at the U. S. Receiving Ship on Commonwealth pier, Boston, Mass., August 28, 1918; and similarly the first cases in Connecticut were U. S. Navy patients, several cases being reported on September 1st from the Naval Hospital at New London. The early cases were taken from ships arriving from foreign ports. During the next few days, cases appeared among the personnel of the U. S. Submarine Base in Groton, two miles north of New London, and later it spread to the civilian population.

This resulted in the disease being made a “reportable disease” by the State Department of Health on September 12th, 1918, in New London County, and throughout Connecticut on September 18th, 1918.

The epidemic prevailed with a far greater severity than ever before, sweeping the state in two distinct waves which reached their crests in October and December-January, 1919.

Past History of Influenza in Connecticut

Epidemic influenza has been present in Connecticut at different periods in the past. It has been shown by different investigators that a marked increase in pneumonia deaths occurs simultaneously with influenza when the latter prevails in epidemic form.

The earliest records in Connecticut on deaths from la grippe or influenza are in 1889, when four deaths were recorded in the state. Since that time, a study of statistics discloses at least seven periods during which influenza was unusually prevalent and may be termed epidemic.

The deaths from influenza and pneumonia in Connecticut since 1879 are given in this report and the high number of pneumonia deaths in 1883, 1885, and 1888 suggests the presence of influenza in those years as a contributing factor toward the great number of deaths from pneumonia.

Deaths from Influenza and Pneumonia

Year	Influenza	Pneumonia (all forms)	Year	Influenza	Pneumonia (all forms)
1879	...	626	1901	668	1,301
1880	...	712	1902	161	1,217
			1903	362	1,386
1881	...	713	1904	409	1,440
1882	...	804	1905	237	1,495
1883	...	905			
1884	...	694	1906	207	1,586
1885	...	1,025	1907	522	1,739
			1908	396	1,370
1886	...	837	1909	193	1,537
1887	...	963	1910	264	1,768
1888	...	1,107			
1889	4	915	1911	299	1,722
1890	185	1,430	1912	174	1,757
			1913	213	1,855
1891	366	1,442	1914	177	1,902
1892	564	1,493	1915	209	1,936
1893	252	1,465			
1894	214	1,118	1916	526	2,553
1895	275	1,289	1917	360	2,661
			1918	7,602	2,991
1896	118	1,361	1919	1,583	1,632
1897	161	1,284			
1898	290	1,092			
1899	660	1,058			
1900	667	1,504			

From this table it is seen that influenza or "la grippe" was unduly prevalent in Connecticut in the following periods, 1890-1892, 1895, 1898-1901, 1903-1904, 1907-1908, 1910-1911, 1916-1919. In looking backward, it is odd that the great increase in deaths due to influenza and pneumonia was passed by almost without comment in 1916 and 1917, the two years prior to the great pandemic in 1918-1919. The exact relationship that the unusually high death rate for those two years bears to the 1918 epidemic is not apparent, nor has any reasonable explanation been put forth by those who have studied this problem.

Unfortunately, influenza was not a reportable disease in any state prior to 1918, so a comparison is not possible therefore on its morbidity in the past. However, the mortality records disclose the great number of deaths in 1899-1901, the number greatly exceeding the 1890-1892 epidemic that is widely heralded as the great epidemic prior to that of 1918. The 660 deaths in 1899, 667 in 1900 and 668 in 1901 indicate clearly that the disease of the fatal type is always present, and again in 1907 the deaths reach a high figure. The year 1916, with 526 deaths, and the corresponding high pneumonia deaths, serve to indicate the fatality of the prevailing type of whatever germ causes influenza.

The deaths from pneumonia in 1918 (2,991) exceeded the

1917 deaths but slightly, and the total of pneumonia deaths in 1919 (1,632) was the lowest number since 1909.

This résumé of the incidence of influenza and pneumonia in Connecticut corresponds with the disease in neighboring states.

Epidemic of 1918 and 1919

The influenza epidemic of 1918 and 1919 was the most disastrous epidemic that ever prevailed in Connecticut, taking a toll of 105,056 cases and 7,602 deaths in 1918, and 10,664 cases with 1,583 deaths in 1919. In addition there were in 1918, 2,991 pneumonia deaths (all forms) and in 1919, 1,632 pneumonia deaths (all forms).

Statistics on Influenza and Pneumonia in Connecticut

	1918		1919	
	Cases	Deaths	Cases	Deaths
Influenza	105,056	7,602	10,664	1,583
Pneumonia	2,256*	2,991†	545*	1,632†

* Lobar Pneumonia cases only.

† Pneumonia deaths (all forms).

This epidemic appeared in the United States at the United States Naval Hospital, Chelsea, Mass., August 28, 1918, the first cases being admitted from the U. S. Receiving Ship at Commonwealth Pier, Boston, Mass.

The disease began in Connecticut on or about September 1, 1918, in New London. During the first ten days of September, nearly 100 cases were admitted to the New London Naval Hospital. On September 10th, 300 men arrived at the Government Station on the State Pier from the Boston Navy Yard, and many cases were reported from this Station during the next few days.

The first civilian cases were three men who lived near Fort Trumbull but who worked at the Fort daily.

The disease spread rapidly through the civilian population, as there were nearly 7,000 naval men billeted in civilian homes in and about New London. In New London, there were 901 cases of influenza in September, more than a tenth of the state total of 8,970 cases for that month. In October 936 more cases were reported from the same city.

While the original focus of infection was from ships at New London, other cases appeared throughout the state toward the end of September, who were soldiers on leave from the New England Army Cantonment, Camp Devens, at Ayer, Mass., or among persons who had visited that camp. Wallingford, Windsted, Windham, Hartland, Rockville and Danbury were among the communities that first reported cases of influenza in the state.

Although cases appeared throughout the state during September, there was a distinct wave in the manner by which the epidemic swept Connecticut from east to west, reaching its peak in the eastern part about October 4th, the central area about October 15th, and the Housatonic River Valley about October 24th. This is more clearly shown by counties.

Dates of Maximum Incidence

County	Peak of Epidemic
New London	October 2
Windham	" 5
Tolland	" 9
Middlesex	" 17
New Haven	" 16
Hartford	" 15
Litchfield	" 25
Fairfield	" 23

This indicates in a general way the manner in which the epidemic spread north and west along the methods of contact. It is difficult to understand why New Haven and Fairfield counties did not feel the epidemic effects earlier; for with a direct railroad from New London to Bridgeport, New Haven and New York, one would naturally look for a rapid spread of the disease to these cities. The nearness of Norwich, Willimantic, Putnam, Vernon, and Hartford by means of travel other than railroad, such as state highways and electric road, is probably the answer in part for the northwest spread, together with the economic factors, acting to bring these communities together.

The Disease

The primary symptoms of the disease were sudden onset, severe headache, chills, fever, general weakness, often prostration, pains in the back, sneezing.

Infecting Agent

Influenza was thought to be due to the Pfeiffer's bacillus discovered soon after the pandemic of 1890-92. The present epidemic has produced many conflicting opinions by investigators as to the status of the Pfeiffer's bacillus. Some believe that this organism is the primary cause and other organisms found are secondary invaders of the body, while another group of investigators do not believe that Pfeiffer's bacillus is the cause of influenza. The question is still a debatable one.

Methods of Infection

Influenza is spread by material from the nose and throat of

sick persons or carriers of the virus causing influenza. The virus may be spread by coughing, sneezing, using handkerchiefs, towels, cups, and other articles previously handled by influenza cases or carriers.

The disease rapidly spreads to all parts of a community by persons who are exposed to cases or carriers in gatherings such as street cars, theaters, churches, and the customary groups that gather to discuss the topics of the day.

Effect of Isolation and Quarantine

The epidemic was successfully kept out of institutions where an absolute quarantine was enforced, but as soon as a person from the outside was allowed to enter and come in contact with persons in a quarantined institution, influenza appeared and ran its course. This was shown in several instances, and one or two are given in this report to show the necessity of absolute quarantine or none at all.

Prevention

Publicity by pamphlets, leaflets, folders and lectures warned the public:

1. Not to inhale any person's breath
2. To avoid persons who cough and sneeze
3. Not to visit close and poorly ventilated places
4. To keep warm and dry
5. To remove wet clothes on arriving home
6. Not to use towels, cups and things others have used
7. To protect others by using a handkerchief when coughing or sneezing
8. To clean one's teeth daily
9. Not to spit on the floor

Incidence of Influenza

Certain of the smaller communities in the state seemed to have been passed over by the epidemic. However, practically every community reported cases, although some were apparently more severely stricken than others.

The cases and deaths from influenza for cities, towns and boroughs are given in the general morbidity and mortality tables of this report.

Morbidity

From returns to the Department from health officers and physicians, apparently from thirty to forty per cent. of the population had influenza of more or less severity.

It was an impossible task to obtain the complete reporting of all cases for physicians were greatly overworked without being overburdened with clerical details.

Cases and Deaths from Influenza and Pneumonia During Epidemic

	Influenza		Pneumonia*		Total Deaths, Influenza and Pneumonia (all forms)
	Cases	Deaths	Cases	Deaths	
1918					
August .....	.....	5	11	68	73
September	8,970	305	128	141	446
October	82,057	5,228	1,464	569	5,797
November	6,244	1,077	207	219	1,206
December	7,785	793	224	267	1,060
1919					
January	6,718	758	258	234	992
February	2,232	313	84	226	539
March	1,242	261	52	289	550
April	263	121	27	175	296
May	56	46	19	148	194
Totals	115,567	8,907	2,472	2,336	11,243

* Pneumonia cases include only lobar pneumonia. Pneumonia deaths include all forms.

[The abruptness of the epidemic is clearly indicated by the above table giving the cases and deaths by months from influenza and pneumonia (all forms) in Connecticut during the epidemic period.]

The cases reported, however, serve to indicate the incidence of the disease in the various counties and the degree to which they were affected as is shown in the accompanying table.

In 1918, Windham County had the highest morbidity rate with Middlesex and Tolland Counties tied for second place.

In 1919, Litchfield County felt the effect of the epidemic as it swept westward and had the highest morbidity rate of the counties in the state.

Mortality

The great number of deaths from influenza were not due primarily to the influenza illness, but rather to the succeeding pneumonia that was a complication in many of the cases. It was particularly the pulmonary septicemic form that was the great factor in the high mortality rate. The second wave in December and January showed a lower mortality rate and the cases seemed to present more symptoms of the true influenza as is known under ordinary conditions.

Certain communities, such as Darien, Glastonbury, Milford, Stafford, Wallingford, Stratford, Plainfield, New Milford, Manchester, Hamden, East Hartford, and Berlin, had lower death rates than the majority of communities of over 5,000 population.

It is noticeable that none of these communities are near New London, the origin of the epidemic in the state at the start, and that the epidemic reached these communities in the first or second week in October after the severer forms of the epidemic had lessened to a certain appreciable extent.

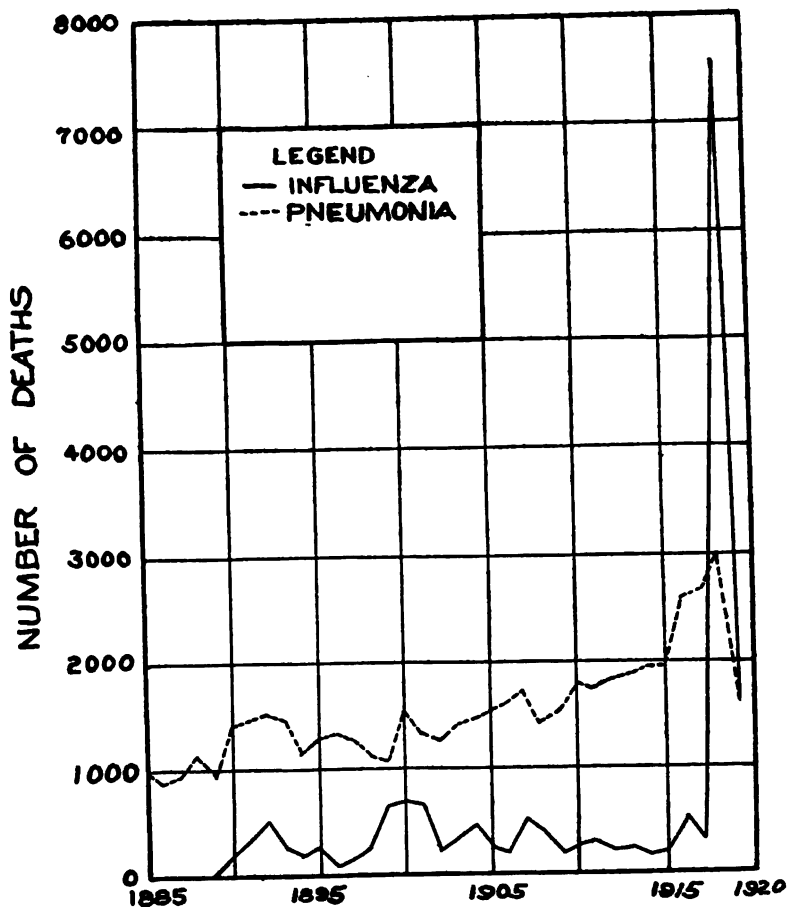
However, New London, Norwich, Windham, West Hartford, Vernon, Seymour, New Britain, Naugatuck, Middletown, Meriden, Hartford, Groton, Derby, Ansonia, and Waterbury, were communities having a higher death rate from influenza and pneumonia.

The area of the Naugatuck River Valley including Ansonia, Naugatuck, Derby and Seymour for some reason had a high death rate and are four of the fifteen towns and cities having a death rate of over 2,100 per 100,000 population.

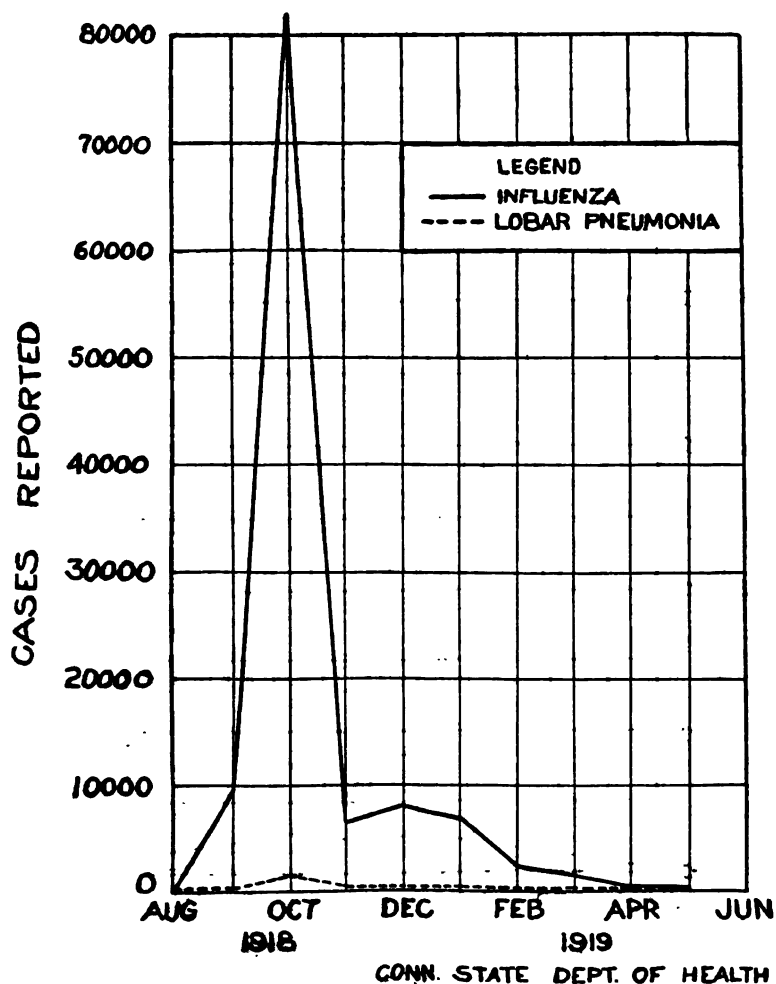
The records show that Windham, Waterbury, Norwich, New London, Middletown, Hartford, and Derby had two or more deaths during the first two weeks of September or during the early stage of the epidemic, or the period at which the virulence of the epidemic was at its height.

The weekly deaths for communities over 5,000 are given in the accompanying table. The communities nearest the original source of invasion, New London, in a general way suffered most, but the second wave of the disease attacked the towns that had not been greatly affected by the first wave in September and October.

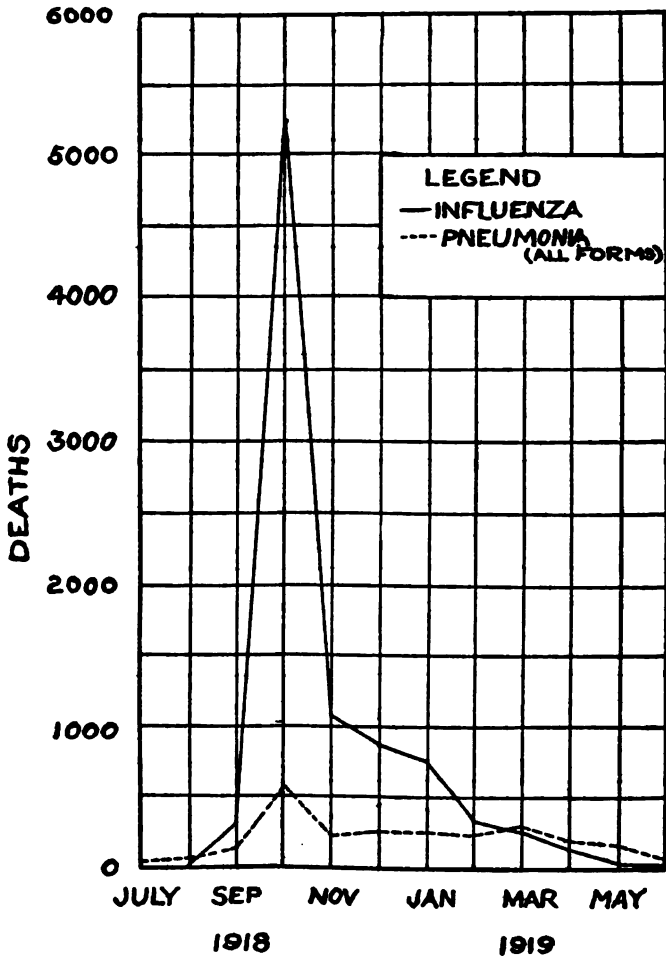
INFLUENZA AND PNEUMONIA(ALL FORMS) DEATHS IN CONNECTICUT 1885-1919



CONN. STATE DEPT. OF HEALTH

INFLUENZA AND LOBAR PNEUMONIA
IN CONNECTICUT 1918-1919

INFLUENZA AND PNEUMONIA(ALL FORMS) DEATHS IN CONNECTICUT 1918-1919



CONN. STATE DEPT. OF HEALTH

**Influenza and Pneumonia in Connecticut by Counties
1918-1919**

Counties	1918		Lobar Pneumonia		All forms Pneumonia
	Influenza				
	Cases	Deaths	Cases	Deaths	Deaths
Fairfield	18,764	1,475	339	525	826
Hartford	26,037	1,848	305	388	639
Litchfield	6,246	359	169	77	135
Middlesex	6,111	234	118	65	138
New Haven	25,928	2,620	909	500	879
New London	6,294	631	348	143	235
Tolland	3,253	156	41	34	55
Windham	12,423	279	27	58	84
Totals	105,056	7,602	2,256	1,790	2,991

Counties	1919		Lobar Pneumonia		All forms Pneumonia
	Influenza				
	Cases	Deaths	Cases	Deaths	Deaths
Fairfield	1,567	357	93	220	405
Hartford	3,235	414	112	199	430
Litchfield	2,244	109	85	37	76
Middlesex	470	42	19	22	59
New Haven	1,494	418	115	242	476
New London	838	171	101	61	120
Tolland	269	30	10	8	26
Windham	547	42	10	12	40
Totals	10,664	1,583	545	801	1,632

(All statistics cover the whole year.)

Morbidity, Mortality and Fatality Rates of Influenza and Pneumonia by Counties

Counties	Population*	Influenza			Pneumonia (Lobar)			Pneumonia all forms	
		Morbidity Rate (per 100,000)	Mortality Rate (per 100,000)	Fatality Rate (per cent. re-ported cases)	Morbidity Rate (per 100,000)	Mortality Rate (per 100,000)	Fatality Rate (per cent. re-ported cases)	Mortality Rate (per 100,000)	
Fairfield	338,344	5,545.83	435.94	7.86	100.19	155.16	154.86	244.13	
Litchfield	81,888	7,627.49	438.40	5.74	206.37	94.03	45.56	104.85	
Hartford	320,970	7,890.71	560.05	7.09	92.43	117.58	127.21	193.65	
Middlesex	53,793	11,360.21	435.00	3.82	219.35	120.83	55.08	256.53	
New Haven ..	421,643	6,149.27	621.37	10.10	215.58	118.58	55.00	208.47	
New London ..	102,485	6,141.38	615.69	10.02	339.56	139.53	41.09	229.30	
Tolland	28,539	11,398.43	546.62	4.79	143.66	119.13	82.92	192.71	
Windham	53,868	23,061.92	517.93	2.24	50.12	107.67	214.81	155.93	
1919									
Fairfield	352,482	444.56	101.28	22.78	26.38	62.41	236.55	114.89	
Litchfield	82,989	2,793.97	131.34	4.85	102.42	44.58	43.52	91.57	
Hartford	344,695	938.51	120.10	12.79	32.49	57.73	177.67	124.74	
Middlesex	54,921	855.77	76.47	8.93	34.59	40.95	115.78	107.42	
New Haven ..	438,791	340.48	95.26	27.97	26.20	55.15	210.43	108.47	
New London ..	106,973	783.37	159.85	20.40	94.41	57.02	60.39	112.17	
Tolland	29,178	921.92	102.81	11.15	34.27	27.41	80.00	89.10	
Windham	54,331	1,066.79	77.30	7.67	18.40	22.68	120.00	73.62	

* Populations estimated from State School Census.

* Populations estimated from State School Census.

Fatality Rate

The incomplete reporting of cases had much to do with the fatality rate of influenza in the different counties.

In 1918, New Haven and New London Counties had a fatality rate of 10 per cent. each, which is a fatality rate approaching that of typhoid fever and is excessively high, even for the epidemic form of influenza. It is probable that the fatality rate of Windham County of 2.2 is indicative of the true rate for this disease. In a similar way, in 1919, the rates of New Haven County, 27.9; Fairfield County, 22.7; New London County, 20.4, are excessively high and indicate a lack of reporting of cases of influenza. This lack of reporting is due to the thousands of cases that occurred in households that were not under the care of a physician, and the householders were in ignorance of the Sanitary Code of the state which provides that they should report cases if a physician is not in attendance.

The fatality rates of 1919 were considerably higher than those of 1918 because of the mildness of the disease, and because of this mildness a larger percentage received home treatment. In 1918 because of the severity of the disease, more cases were attended by physicians and more complete reporting of cases resulted.

Relation of Influenza and Pneumonia Deaths to Total Deaths

During the four months, September to December, inclusive, at the period of the height of the epidemic there were 8,616 deaths from influenza and pneumonia (all forms) out of 15,158 deaths from all causes, or approximately 56.8 were deaths due to the epidemic.

The exact relationship of influenza and pneumonia is not clear. The great number of influenza deaths in 1919 with the low number of pneumonia deaths in the same year would seem to indicate that under certain conditions influenza predisposes to severe pneumonic and septicemic conditions, whereas ordinarily the opposite is true.

The accompanying charts and table cover the period from September 1 to December 28, 1918, for the entire state, and they show the reported cases of influenza by weeks (Fig. 1); reported deaths from influenza and pneumonia by weeks (Fig. 2); deaths from influenza and pneumonia by age groups (Fig. 3); and the number of influenza and pneumonia deaths in individual towns of more than 5,000 population (Fig. 4).

While these tables illustrate the course of the epidemic during its most violent period, they do not show its full effects, for many thousands of cases, resulting in upwards of two thousand deaths, occurred in this state during the first four months of the present year.

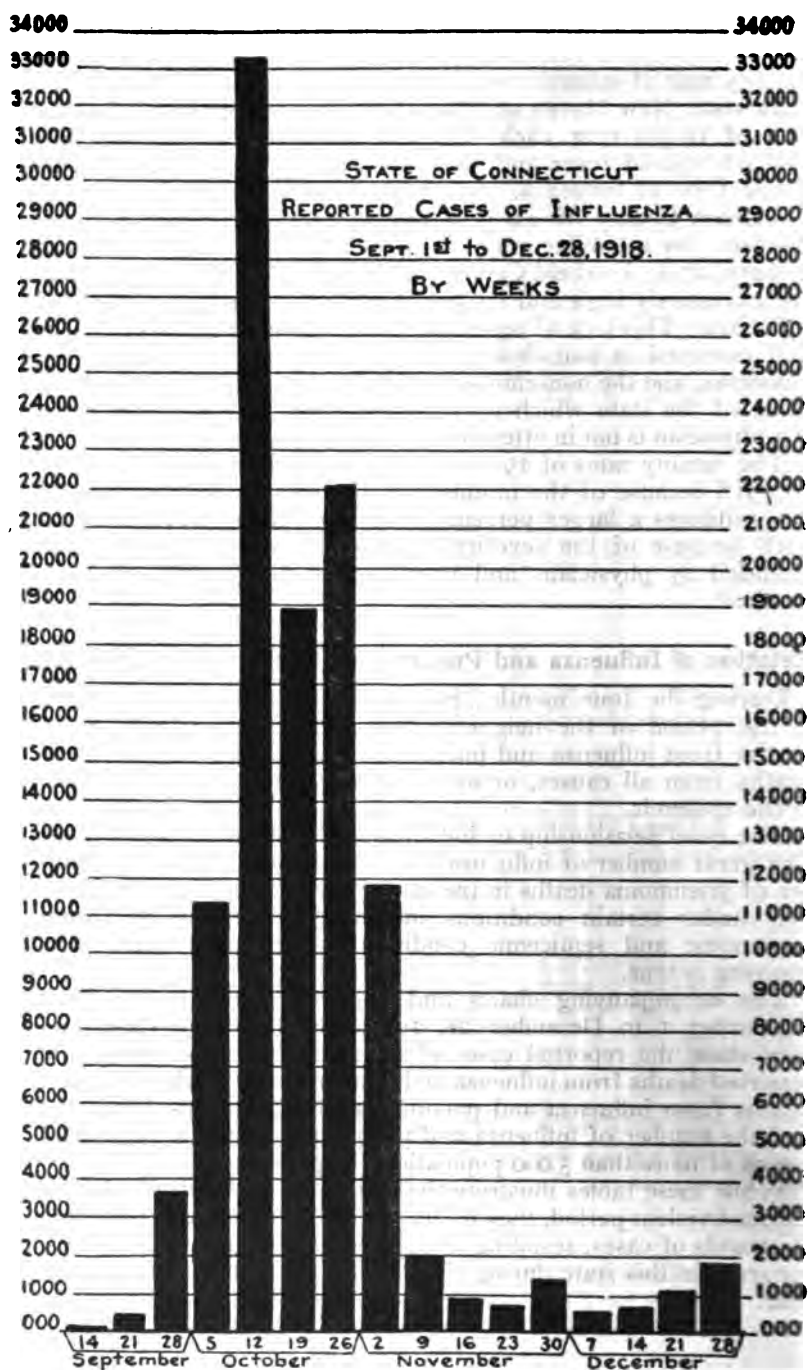


FIG. 1.—Reported Cases of Influenza, Sept. 1 to Dec. 28, 1918

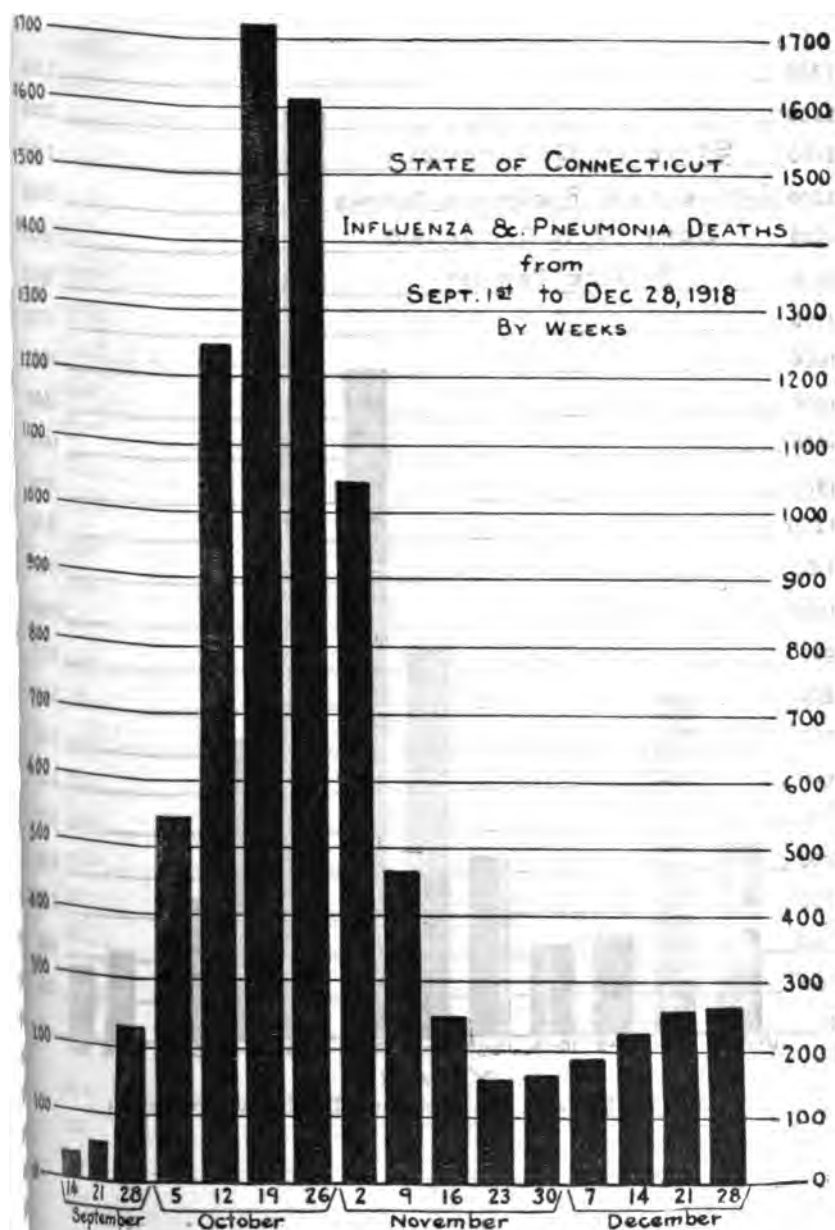


FIG. 2.—Influenza and Pneumonia Deaths, Sept. 1 to Dec. 28, 1918

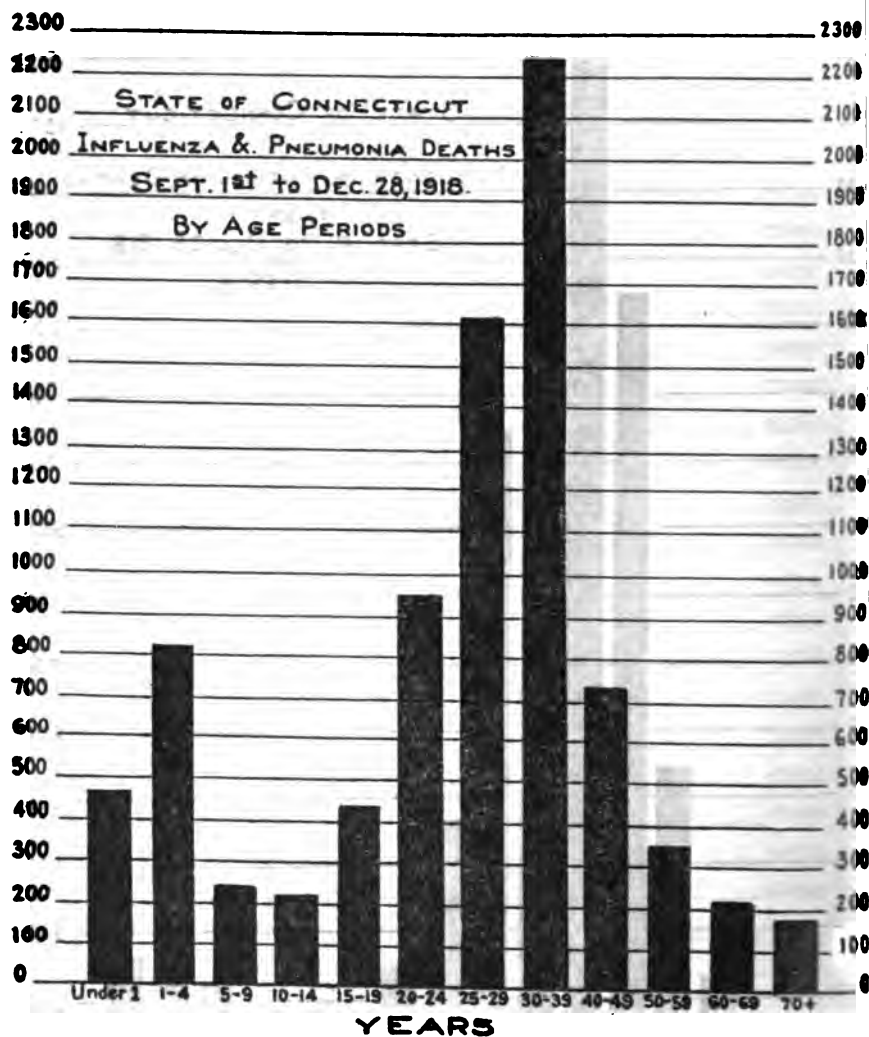


FIG. 3.—Influenza and Pneumonia Deaths by Age Periods

Deaths from Influenza and Pneumonia (All Forms)

Showing the Spread of the Epidemic 1918

Towns	September				October				November					December			
	7	14	21	28	5	12	19	26	3	9	16	23	30	7	14	21	28
Andover	—	—	2	12	18	28	28	13	9	5	—	2	4	1	2	4	4
Berlin	—	—	—	1	—	2	4	4	4	—	1	1	—	1	—	—	1
Branford	—	—	—	—	—	1	5	4	9	9	4	—	—	—	—	—	1
Bridgeport	—	2	—	10	14	45	103	199	196	102	53	29	32	19	26	24	22
Bristol	—	—	—	2	2	30	30	25	10	2	—	—	3	2	3	1	1
Danbury	—	—	—	1	6	15	20	29	23	8	3	—	1	2	4	6	2
Darien	—	—	—	—	—	1	1	2	4	1	2	—	—	—	—	1	1
Derby	—	—	—	—	—	—	—	—	12	3	—	—	2	—	—	2	2
East Hartford	—	2	3	13	47	32	12	12	4	3	—	1	1	2	1	—	—
Enfield	—	—	—	—	2	7	6	7	13	6	1	—	—	1	1	5	1
Fairfield	—	—	—	1	—	4	3	9	13	13	2	2	3	2	2	4	1
Glastonbury	—	—	—	—	1	1	2	—	2	1	1	1	2	1	1	—	—
Gretwich	—	—	—	—	6	12	20	34	19	8	5	1	4	2	2	4	4
Groton	—	—	—	6	9	4	10	3	1	2	2	2	4	2	2	2	2
Haddam	—	—	—	—	1	6	8	7	5	3	1	—	2	—	—	1	1
Hartford	4	1	12	34	64	141	206	139	96	42	24	17	24	25	29	25	29
Killingly	—	—	—	1	4	11	3	4	2	1	—	—	3	1	—	—	—
Manchester	—	—	—	—	4	14	13	12	9	2	1	—	1	3	1	—	4
Meriden	—	—	2	3	22	89	72	33	19	7	4	4	2	3	4	2	3
Middletown	2	—	2	3	7	35	53	36	17	19	12	6	2	4	4	12	6
Milford	—	1	—	—	1	—	7	3	6	2	—	1	—	1	2	2	—
Naugatuck	—	—	—	1	19	27	32	30	11	1	2	—	—	1	1	1	5
New Britain	—	1	1	5	23	75	138	104	51	34	2	7	7	11	11	7	7
New Haven	1	—	1	16	38	89	164	194	164	75	40	19	26	26	30	49	36
New London	—	1	9	41	62	56	21	13	5	5	4	7	6	2	1	4	7
New Milford	—	—	—	—	—	1	2	6	4	2	—	1	—	—	—	—	—
Norwalk	—	—	—	—	1	5	18	37	25	14	9	4	3	8	4	3	7
Norwich	3	1	9	26	60	39	30	12	5	3	2	1	1	2	2	2	4
Orange	—	1	—	—	2	3	14	16	9	3	1	1	2	5	6	4	6
Plainfield	—	—	—	1	4	2	8	4	2	1	2	1	1	—	—	—	—
Plymouth	—	—	—	—	2	9	13	11	5	1	—	1	—	—	—	2	3
Putnam	—	—	—	2	4	18	3	8	4	1	5	—	—	1	1	—	1
Seymour	—	—	—	—	1	8	23	27	9	1	1	1	—	1	1	—	—
Shelton	—	—	2	6	9	10	7	3	1	1	1	1	1	2	—	—	1
Southington	—	—	—	1	—	2	2	13	12	3	2	3	2	2	2	2	1
Stafford	—	—	—	—	—	1	2	1	2	2	—	1	—	—	—	1	1
Stamford	—	2	—	19	26	35	66	62	32	15	3	4	2	5	11	11	16
Stonington	—	—	1	2	11	12	5	3	—	—	—	1	1	1	2	1	7
Stratford	—	—	—	1	2	1	4	9	5	6	2	4	1	2	3	1	—
Torrington	—	—	—	—	1	6	13	23	17	15	8	3	5	7	9	13	6
Vernon	—	—	—	—	—	16	22	10	7	1	1	—	1	—	—	1	3
Wallingford	—	—	1	5	9	14	10	3	2	—	—	1	—	—	—	1	1
Waterbury	2	1	1	6	15	112	289	238	113	37	20	6	2	6	15	19	15
Westertown	—	—	—	—	—	4	11	7	3	—	2	—	2	—	1	1	1
West Hartford	—	—	—	—	2	7	1	22	7	1	1	—	1	3	4	1	4
Westport	—	—	—	—	—	5	7	4	1	—	—	1	2	6	1	—	—
Witchester	—	—	—	1	3	9	7	14	9	4	1	1	—	1	2	1	—
Windham	—	1	3	13	34	57	24	12	1	1	—	—	—	1	3	2	—
Windsor	—	1	—	—	—	5	—	8	7	4	1	1	—	1	—	—	1
(Towns under 5,000)	3	5	11	17	35	133	142	124	57	40	29	22	16	18	30	31	42

Total for State. 15 18 62 228 346 1,252 1,714 1,604 1,046 487 246 166 170 192 225 256 261

Ages of Influenza Cases and Deaths

The epidemic was particularly fatal to children under five years of age and the age group of 25-39 years.

The following table of the deaths from influenza and pneumonia from September 1, 1918, to December 28, 1918, shows the age distribution of the deaths and also compares the deaths with the 1917 age distribution:

Deaths from All Causes for Period September 1 to December 28, 1918,
Compared with Same Period 1917

Age Groups	Total Deaths Sept. 1 to Dec. 28 All Causes		Excess Deaths in 1918	Deaths from Influenza and Pneumonia 1918	Percentage of each age group to total deaths	
	1917	1918			1917	1918
Under 1 year.....	1,091	1,505	414	474	18.2	10.7
1 to 4 years	409	1,111	702	816	6.8	7.9
5 to 9 years	136	366	230	245	2.3	2.6
10 to 14 years	76	295	219	218	1.1	2.1
15 to 19 years	108	571	463	433	1.8	4.1
20 to 24 years	186	1,130	944	962	3.1	8.1
25 to 29 years	202	1,831	1,629	1,602	3.4	13.0
30 to 39 years	470	2,688	2,218	2,243	7.8	19.1
40 to 49 years	571	1,275	704	732	9.5	9.1
50 to 59 years	672	991	319	361	11.2	7.1
60 to 69 years	840	924	84	215	13.9	6.6
70 years and over .	1,242	1,370	128	186	20.6	9.7

Complete statistics will appear in the Connecticut Vital Statistics Reports for 1918 and 1919.

Influenza Vaccine

Soon after the epidemic started, different vaccines appeared and were hoped to be useful as a prophylactic against influenza.

The vaccine used chiefly by the department was that made by Dr. Watters of Boston University Medical School and Dr. O'Leary of Tufts College Medical School. Over 4,000 doses of these vaccines were distributed for use by the department in institutions and among industrial plants where its effects could be studied and value determined.

From reports received, it was impossible to form any definite conclusion, but the vaccine apparently had little influence as a preventive or in diminishing the severity of the illness in individual cases.

Department Activities

With the appearance of influenza in epidemic form, and the making of the disease reportable, many activities were necessary in the handling of an influenza epidemic that are absent in other

epidemic diseases. The newly organized Department was suddenly called on to furnish doctors, nurses, assist in establishing emergency hospitals, and to use all possible means along educational lines to prevent the spread of the disease through ignorance of the laws of respiratory diseases.

Educational Measures and Publicity

Educational measures were immediately taken through the press, pamphlets and posters to warn the public of the character of influenza and particularly the precautions necessary to avoid infection.

Much of the publicity advocating preventive methods against influenza was carried on by placards and leaflets, and the latter were supplied to health officers and Red Cross chapters by the thousands.

The Commissioner of Health was assisted by the State Council of Defense, and as this organization was already carrying out educational work for war purposes, it was an excellent medium for distributing influenza information throughout the state. Many bulletins were sent out by the State Department of Health through the State Council of Defense.

These carried information as follows:

HALT INFLUENZA

PLAY SAFE. If you become ill, don't delay treatment. Influenza is rapid in its onset. It is usually preceded by a chill, a chilly sensation or dizziness. Sometimes a marked feeling of weakness is the first symptom.

The following suggestions for "Treatment of influenza without complications" are issued by the Connecticut State Council of Defense and contain the advice of medical authorities:

FIRST — Upon experiencing any influenza symptoms go to bed at once then **CALL A PHYSICIAN.** Take no chances.

THEN — While waiting for the physician, or, in case you are unable to secure one, take a saline cathartic (dose of Epsom or Rochelle salts) to be followed soon after by a drink of hot lemonade, in order to get the bowels and skin active. This is of paramount importance, as it helps to rid the system of many toxins. Should profuse perspiration occur, the body should be wiped with a soft towel. If the patient is restless, due to high fever, an ice-cap placed at the head and kept there for one or two hours at a time will reduce nervousness and make the patient more comfortable.

VENTILATION The room should be well ventilated by open windows which will tend to allay irritation of the nose and throat. Cold air is not harmful, but close air acts as a poison.

DIET — It is necessary to retain the body resistance by a regular diet. This consists of milk every two hours for the first day. If the patient is unable to take milk substitute broths or light gruels. In either case give a **PLENTIFUL SUPPLY OF WATER.** After the first or second day cocoa and broths may be added. As the fever subsides, lightly cooked eggs, toast and cereals are permissible.

DON'T GET UP TOO QUICKLY

Usually on the fourth or fifth day the patient's temperature subsides to practically normal, but it is at this time that the utmost care is needed to prevent the pneumonia complication, and the surest way to do this is to **REMAIN IN BED AT LEAST FORTY-EIGHT HOURS AFTER THE FEVER HAS SUBSIDED.**

Those caring for persons afflicted with influenza should provide themselves with masks. Directions for making such masks follow:

For material use as fine gauze or cheesecloth as possible. Fold the material to make five thicknesses, and cut an oblong $5\frac{1}{2}$ by $7\frac{1}{2}$ inches. Make three half-inch pleats at each end, turn in edges and stitch. Cut four feet of tape into four lengths and sew one to each corner. Make box pleat $1\frac{1}{2}$ inches in width on one of the long edges of the mask; stitch down one inch.

To adjust, place the mask over the face, tie the tapes from upper corners around the back of the head and the tape from the lower corners around the back of the neck. Place box pleat over the nose.

These masks should be changed at two hour intervals and oftener if wet. They should then be immediately boiled for five minutes, or burned, or wrapped securely in a paper bag or newspaper until they can be boiled.

Distributed by the Connecticut State Council of Defense through its local Agency, at Request of State Department of Health.

HELP FIGHT THE GRIPPE

KAISER WILHELM'S ALLY

How Not to GET It	How Not to GIVE It
GET FRESH AIR AND SUNSHINE. AVOID CROWDED PLACES, ESPECIALLY CARS. KEEP AWAY FROM SNEEZERS AND COUGHERS. DON'T VISIT PEOPLE ILL WITH COLDS. KEEP YOUR MOUTH AND TEETH CLEAN. PROTECT THE BODY BY PROPER CLOTHING. AVOID EXPOSURE TO SUDDEN CHANGES. AVOID WORRY, FEAR AND FATIGUE.	STAY AT HOME ON THE FIRST INDICATION OF A COLD. DON'T RECEIVE VISITORS WHILE SICK OR RECOVERING. DON'T LEAVE YOUR HOME UNTIL ALL SYMPTOMS HAVE GONE. DON'T SNEEZE, SPIT OR COUGH IN PUBLIC PLACES. DON'T HESITATE TO COMPLAIN AGAINST CARELESS COUGHERS AND SITTERS.

THE STATE DEPARTMENT OF HEALTH AND THE CONNECTICUT STATE COUNCIL OF DEFENSE URGE YOU TO

DO YOUR BIT TO STOP THE GRIPPE

MADE IN CONNECTION WITH THE OFFICE OF THE STATE DEPARTMENT OF HEALTH

Colored Print Press, Storrs, Conn.

State Department of Health

OFFICIAL INSTRUCTIONS

INFLUENZA

Care of Self and Others

Masks

1. To be worn while attending patients.
2. Adjust properly before entering sick room.
3. **KEEP HANDS OFF** when once adjusted.
4. Change every two hours, or oftener if it becomes moist.
5. Drop used masks in a receptacle kept for that purpose.
6. Never wear a mask that has been used unless it has been sterilized.
7. Sterilize by boiling or destroy by burning. (See direction for making mask.)

Hands

1. Wash hands with soap and hot water after contact with each patient.
2. Always scrub hands before eating.

Teeth

1. Brush teeth frequently.

Care of Patient

General

The earlier a patient is placed in bed and kept there, the bowels opened by salts, or enema, or both, followed by a diaphoretic (hot lemonade is an efficient diaphoretic), the chances of early and complete recovery are greatly enhanced.

Follow general nursing care of patient as directed by the physician, which will probably include:

1. Keeping patient as quiet as possible.
2. Giving nourishment at regular intervals—preferably milk for first two days, then broths, cocoas, cooked cereals or gruel; later, eggs, etc.
3. Giving quantities of water to drink.
4. Using paper handkerchiefs for collecting discharges from nose and throat. (Have a paper bag convenient for patient to dispose of used handkerchiefs. Collect frequently and burn.)

Screens

When there is more than one patient in a room, place a screen between beds to prevent cross infection between patients.

Dishes

Patient's dishes to be thoroughly boiled after each use.

Unused Food

Food returned from the sick room to be destroyed.

Bedding

Change bedding as soon as soiled by excretions.

Drafts

Avoid exposing patient to drafts. Protect by screens and proper clothing.

Convalescence

Keep patient in bed at least 48 hours after temperature has reached normal.

Patients' Room

Sunlight

When possible, obtain a room exposed to sunlight. Keep it well ventilated all the time.

Do not dry sweep room but sprinkle moistened sawdust or other suitable material upon the floor before gathering up dust.

Keep a basin of antiseptic solution in the room for use of hands.

Isolation

Visitors

Exclude all unnecessary visitors for their own safety and the comfort of the patient. Visitors must wear a clean mask and be instructed in its use.

Discourage handshaking by patient and visitor.

Do not allow kissing of patient.

See that visits are short.

Insist that visitors wash their hands thoroughly before leaving the sick room.

Directions for making Masks

For material use as fine gauze or cheese cloth as possible. Fold the material to make five thicknesses, and cut an oblong $5\frac{1}{2} \times 7\frac{1}{2}$ in.

Make three half-inch pleats at each end, turn in edges and stitch.

Cut four feet of tape into four lengths and sew one to each corner.

Make box pleat $1\frac{1}{2}$ in. in width on one of the long edges of the mask; stitch down one inch.

To adjust, place the mask over the face, tie the tapes from upper corners around the back of the head and the tapes from the lower corners around the back of the neck. Place box pleat over the nose.

These masks should be changed at two hour intervals and oftener if wet. They should then be immediately boiled for five minutes, or burned, or wrapped securely in a paper bag or newspaper until they can be boiled.

TO PREVENT INFLUENZA

1. Don't Inhale any Persons
Breath.
2. Avoid Persons who Cough
and Sneeze.
3. Don't Visit Close, Poorly
Ventilated Places.
4. Keep Warm and Dry.
5. If You Get Wet, Change
Your Clothes at once.
6. Don't Use Drinking Cups or
Towels that Other People
have Used.
7. For the Protection of Others,
Cover your Mouth when you
Cough or Sneeze.
8. Clean your Teeth and Mouth
Frequently.
9. Don't Spit on the Floor.

Issued by the State Department of Health
and Connecticut State Council of Defense.

RECEIVED OCT 21 1918

WARNING!

Influenza is Subsiding BUT DANGER STILL LURKS

Advice To Those Who Have Escaped The Disease

Avoid those who Cough and Sneeze

Don't visit close, poorly ventilated places

Don't use common drinking cups or towels

Keep your hands and teeth clean by frequent brushing

Advice To Convalescents

Avoid close contact with other people until all signs of cough have disappeared

Carefully dispose of secretions from nose and mouth

Avoid over-exertion

Continue treatment until perfectly well to avoid

Chronic { lung trouble
ear
nervous "

Do Not Spit in Public Places—It spreads Disease

BE FAIR TO OTHERS

Much of the educational matter and information was supplied to the press through the State Council of Defense.

Health officers throughout the state were notified of the appearance of the epidemic type of influenza early in September and many press notices were given to the papers of the state as often as was felt necessary during the course of the scourge. One of the early notices read as follows:

State Capitol, Hartford, Sept. 26—Because Spanish influenza is at present epidemic, extraordinary precautions should be taken not only to avoid contracting the disease but to prevent the possible development of pneumonia, said Dr. John T. Black, State Commissioner of Health, in a statement issued to-day for the guidance of the public during the epidemic.

"Spanish influenza is an infectious disease which should at all times be seriously considered because of the frequent development of pneumonia as a consequence," Dr. Black said. "Widespread epidemics occasionally occur, as at present, with more or less disastrous results. When influenza once gets a foothold in a community it is practically impossible to check it by the usual methods of controlling communicable diseases. Many, however, can often avoid serious consequences by observing a few simple precautions."

"Most cases of pneumonia occur in the cases of persons who try to fight off symptoms of influenza without going to bed, or who leave their beds before recovery is complete."

Here are Dr. Black's precautionary instructions:

How to Avoid Influenza

1. Keep your mind and body in as near a normal state as possible.
2. Avoid overwork and excesses.
3. Don't allow anyone to breathe, cough or sneeze in your face.
4. Keep away from public gatherings.
5. Keep your teeth clean by brushing and by the use of an antiseptic gargle night and morning.

How Not to Give Influenza

1. Upon the first indications of cold or fever retire immediately to your home and send for the doctor.
2. If the doctor confines you to your room or sends you to bed, stay there until he tells you to go out or get up.
3. Bar all other visitors until well on the road to recovery.

September 30, 1918.

OFFICIAL STATEMENT ON INFLUENZA

The following statement concerning the prevailing epidemic was issued by Dr. J. T. Black, Commissioner of the State Department of Health. It was urged that it be given wide publicity throughout the state:

The prevailing disease, influenza, is one which should be seriously considered because it is frequently followed by pneumonia. Fear and dread of this disease should not pervade the minds of the people, but rather a common-sense resolution to endeavor to avoid it, and if not successful, to follow good advice.

While laboratories have not determined the exact cause of the prevailing disease, it so simulates the well-known influenza or la grippe that for all practical purposes it should be treated as such.

Symptoms

The disease is characterized by a sudden onset, often requiring the afflicted person to drop his or her work. The first symptoms are those of chilliness, or chill, accompanied by a tickling or scratchy throat and cough sometimes with coryza and sneezing. The chill is followed by headache, backache, high fever and great prostration. Fever range continues high from three to four days when, in the mild type of the disease, it subsides gradually, and recovery is uneventful aside from general weakness. In children nosebleed and vomiting are frequent.

A persistent cough accompanies the disease in practically all cases. The complication of pneumonia may occur about the fifth or sixth day. About ten per cent. of all cases have so far developed pneumonia, with about ten per cent. of those proving fatal. Pneumonia develops rapidly involving a large area, and when cases are fatal death usually occurs within forty-eight hours. Recovery of the non-fatal cases of pneumonia is almost as rapid as the onset. One per cent. of all cases of influenza are fatal, with pneumonia as practically the only complication.

Control

When influenza once gets a foothold in a community, it is impossible to check it by the usual methods used to control communicable diseases. Many people, however, can avoid contracting the disease by observing the recommendations of health authorities, and many who do contract it can often avoid serious consequences by carefully observing the instructions of physicians.

How to Avoid Influenza

1. Endeavor to keep in as healthy a condition as possible. Avoid overwork and other excesses.
2. Do not allow anyone to breathe, cough or sneeze into your face, and keep away as much as possible from public gatherings.
3. Keep teeth, mouth and throat clean.

How Not to Give Influenza

1. Upon the first indication of cold or fever, one should immediately repair to his or her home, there to remain until the cause of the discomfort is known.
2. Persons ill with definite symptoms of influenza should confine themselves to their rooms and bar all visitors until well on the road to recovery.

How to Avoid Pneumonia

1. Do not try to stick it out. If you think you have the disease, go to bed at once.

2. Do not get up or return to work until permitted to do so by your physician, as most cases of pneumonia have occurred in those who have failed to observe these precautions.

The epidemic is rapidly spreading throughout the state, cases being numbered by hundreds in many cities. New London and Norwich, the cities first affected, now have three to four thousand cases each. Many more will undoubtedly develop within the next week or ten days throughout the state, and it behooves every individual to take utmost precautions to avoid the infection. Any person suffering with this disease who unnecessarily exposes others at this time, is guilty of a most unpatriotic act.

It is not believed that the closing of schools will materially check the progress of the disease, but unquestionably the teachers in the state can do much toward lessening the number of cases by observing each child as it enters school and sending home those who show any signs of cold, cough or illness. If it were possible to keep school children at home, there might be some advantage in closing the schools, but experience has shown that when schools are closed, the children visit each other's homes to such an extent that the object in closing the schools is rendered practically nil.

Widest publicity should be given by health officers to the fact that the attendance at public gatherings renders one most liable to contract this disease. More or less anxiety is felt over the possibility of a shortage of doctors and nurses for the next two weeks, and it is urged that every effort be made to conserve the strength of these professions. Unnecessary calls or operations which could be postponed, should be allowed to wait. Many physicians who have been fighting the epidemic have, because of overwork and exhaustion, contracted the disease, and a number of cases have proven fatal. Cool judgment, common sense and obedience to instructions will greatly lessen the evil effects of this or any epidemic.

State Capitol, Hartford, October 10—All pastors in the state were to-day urgently called upon by the State Department of Health to coöperate in the campaign to check the epidemic of Spanish influenza. Pastors were asked to explain the nature of the disease to their congregations and to impress upon the latter that there must be no sneezing or coughing during church services.

"Pastors can do much toward preventing the spread of the epidemic if they will explain to their congregations that the infection is spread from the sick to the well by means of the discharge from the nose and throat conveyed by coughing and sneezing," said Dr. John T. Black, State Commissioner of Health. "Pastors should also request that any member of the congregation who is liable to sneeze or cough during the service ought to retire in the interest of the health of those sitting nearby."

Physicians and nurses, while attending cases of influenza, were urged by the State Department of Health to wear masks. These, it was said, should be adjusted to the face before entering a sick room and not removed or otherwise touched by the hands until the attendant leaves the room. Then the hands should be thoroughly washed in an antiseptic solution and the mask sterilized. Hospital assistants, according to the Health Department, should change their masks at two-hour intervals unless the masks are wet, when they should be changed at shorter intervals. The masks should then be sterilized.

Disinfection of masks, it was explained, may be accomplished by boiling them for five minutes. Until they can be boiled, they should be wrapped securely in paper.

The Health Department pointed out that observance of these rules would lessen the danger of infection to attendants.

State Capitol, Hartford, October 11—Directions for the making of gauze face masks, which should be worn by all persons attending cases of influenza or pneumonia, were announced to-day by the State Department of Health. The directions follow:

For material, use as fine gauze or cheese-cloth as possible. Fold the material to make five thicknesses, and cut an oblong $5\frac{1}{4}$ by $7\frac{1}{4}$ inches. Make three half-inch pleats at each end, turn in edges and stitch. Cut four feet of tape into four lengths and sew one to each corner. Make box pleat $1\frac{1}{2}$ inches in width on one of the long edges of the mask; stitch down one inch.

To adjust, place the mask over the face, tie the tapes from upper corner around the back of the head and the tape from the lower corners around the back of the neck. Place box pleat over the nose.

These masks should be changed at two-hour intervals and oftener if wet. They should then be immediately boiled for five minutes, or burned, or wrapped securely in a paper bag or newspaper until they can be boiled.

For the Protection of Those Attending Cases of Influenza

The State Department of Health urges physicians and nurses to wear masks while in attendance upon cases of influenza. Masks should be adjusted to the face before entering a sick room and not touched by the hands nor removed until the attendant leaves the room, after which the hands should be thoroughly washed in an antiseptic solution and the mask sterilized in a manner stated below. In the case of hospital attendants masks should be changed at two-hour intervals and oftener, if wet, and immediately boiled. To disinfect masks they should be immediately boiled for five minutes, or burned, or wrapped securely in paper until they can be boiled.

Close observance of these suggestions may prevent attendants becoming infected.

Closing of Public Places

The policy of keeping open public places, as schools and theaters, was advocated and in the large cities of Bridgeport, Hartford and New Haven, where this plan was followed, the course of the epidemic was apparently more extended and less explosive in character than elsewhere in the state. The extension of the epidemic in this way assisted in allowing more medical care to be given to the patients by physicians, which in itself undoubtedly had a tendency to prevent fatalities and produce a lower death rate. The policy of the department was clearly stated in the letter sent to all local health officers on October 3d:

STATE OF CONNECTICUT

Department of Health

HARTFORD, October 3, 1918

Local health authorities are asking for advice regarding closing of schools during the present epidemic of influenza. Our instructions are that the policy of this department is that schools should not be closed as experience in nearly all epidemics has shown that pupils are safer in a well-ventilated school and under the observation of teachers than when schools are closed and the children allowed to intermingle in homes and upon the streets. We advise that teachers be instructed to observe each pupil closely for the first sign of a cold, and should any occur, that the child be sent home immediately and the name and address of the pupil submitted to the health officer by the school authorities.

The question as to the admission to school of any contacts (brothers and sisters) of a case should be largely governed according to the known social conditions of the home; but in general, contacts of a child showing signs of cold should be allowed to attend school as contacts are safer in school than they are when kept at home in close association with the patient, and because it is a very large question whether the disease is conveyed by the well.

We especially urge that school teachers exercise very good judgment in trying to allay undue fear on the part of pupils and the pupils' parents. Perhaps short talks might be given by the teachers to their charges, stating that "anyone with symptoms of a cold should go to bed immediately and not wait until to-morrow. Take a laxative. Drink much plain water. Have plenty of fresh air in the room. Send for a doctor and stay in bed at least forty-eight hours after all symptoms have subsided."

How to Avoid Infection

Influenza is highly communicable from the sick to the well. To avoid infection keep out of places where sick people are. Do not let anyone cough or sneeze into your face. If they should, protect your mouth and nose immediately. Wash hands frequently. Keep mouth and teeth clean. Avoid getting tired—go to bed early. Eat your meals regularly and slowly. Keep away from any place where the disease is.

If these precautions are observed, the chance of being infected is not great.

By direction of the Commissioner of Health.

Very truly yours,

T. E. REEKS,

Director

Bureau of Preventable Diseases.

October 5, 1918

TO HEALTH OFFICERS:

Through the State Council of Defense, the State Department of Health is sending notices to theatre owners and managers stating that the policy of this Department is not to recommend the closing of theatres because of the epidemic of Influenza UNLESS LOCAL CONDITIONS WARRANT IT, provided the owners or managers pay special attention to ventilation, and that they throw on the screen at least three times during each performance, slides to read as follows:

- 1st. "The Health Authorities will close this theatre unless spitting, coughing or sneezing is omitted during performances."

To be followed immediately by—

- 2d. "Sneezing and coughing in this theatre may spread Influenza. Be fair, and stay home if you have a cold."

To be followed by—

- 3d. "If you have a cold retire now. Do not endanger the health of others, and save yourself embarrassment."

If, notwithstanding these slides, sneezing or coughing occurs, the performance is stopped and the following slide is to be used:

"The person sneezing or coughing will please retire now in the interest of the health of those sitting near him!"

Of course propaganda already instituted in theatres by local health authorities will take precedence, if they so desire.

The Council of Defense is now having posters relative to Influenza printed for display in every town.

Through the newspapers we are suggesting that it would be a fine thing were the clergy to request members of their congregations with colds to remain at home, etc.

Report each day only number of new cases of Influenza; names not required. Would suggest that you require same of physicians.

By direction of the Commissioner of Health.

T. E. REEKS,

Director

Bureau of Preventable Diseases.

State Capitol, Hartford, October 5—In its current campaign to check the epidemic of Spanish influenza, the state department of health does not advocate the closing of either schools or theaters. Instead, it is asking teachers to observe the school children and to send home and report all those showing influenza symptoms. Theater managers are being informed that they must carry out certain orders of the health department. If they do so, theaters will not be closed. In manufacturing centers containing large numbers of tenement houses, representatives of local health departments are being sent to the factories to give one-minute talks on influenza prevention to the employees.

The instructions of the state department of health to the school authorities direct the latter to ask teachers to send home any child exhibiting any symptoms of a cold, and to send the child's name and address to either the school inspector or the health officer. The brothers and sisters of such a child will be kept in school, Dr. John T. Black, secretary of the state department of health, saying that in all epidemics affecting schools, fewer children are infected when the schools are kept open than when they are closed.

"When schools are closed, children are apt to play together at all hours of the day whereas when they are in school there is a certain amount of isolation, and when the ventilation of school rooms is properly supervised, pupils are far better off there than at home," said Dr. Black.

The state department of health believes that the entertainment provided by theaters has a good psychological effect upon the human system, and tends to raise the resisting powers of the body against infection. In order to be allowed to keep the theaters open during the epidemic, managers must agree to show upon the movie screen four slides. These slides will explain a few simple anti-influenza rules.

Physicians and Nurses

Physicians and nurses were absent on war duty, leaving a greatly reduced number at home, who were barely able to successfully cope with the usual diseases. The influenza epidemic added to their burdens, and it was necessary to call in physicians and nurses from outside the state to cover those portions of the state not provided with medical and nursing service.

The progress of the epidemic was so rapid and the need of additional medical and nursing service so apparent that a call for nurses was sent out by the Department on October 5th, 8th, and 17th.

NURSES

Graduate and Non-graduate

You are needed in Connecticut to help overcome the influenza epidemic. Don't leave your home state folks to die while you seek a Pot of Gold at the end of a rainbow somewhere else.

State Department of Health will place you where you can serve best.

Guarantees your pay. Graduate nurses, \$28 per week and expenses; trained nurses' assistants, \$15 per week and upward and expenses.

Report at once by telegraph or telephone to State Department of Health, Hartford, Conn., for assignment.

Call Sent Out Through State Council of Defense

October 5, 1918

State Capitol, Hartford, October 5—All doctors and nurses who are in a position to render their services wherever in the state they may be most needed during the influenza epidemic were urged to-day by Dr. John T. Black, secretary of the state department of health, to send their names to that department. Doctors and nurses called upon will be given compensation and all expenses.

Dr. Black said there was a great need in Connecticut of doctors and nurses.

"As the epidemic reaches its height and sweeps over the state from east to west, pneumonia and deaths increase in number, and in certain communities the shortage of physicians and nurses is greatly felt," Dr. Black declared. "The department of health earnestly urges upon all physicians and nurses not to leave the state, but to remain where they are in readiness for a call. No doctor or nurse should neglect the opportunity to render his or her very real bit by thinking that there is someone else to bear the burden. Personal risk incidental to attending cases of influenza can be avoided by wearing a mask."

Call Sent Out Through State Council of Defense

October 8, 1918

OFFICIAL CALL

The need of services of nurses' aides to care for those stricken by influenza is urgent, and, in many cases, desperate. Whole families are ill with no doctor or nurse in attendance, and in many cases patients are suffering for want of water and food as they are too sick to get it themselves.

The duties of nurses' aides consist in rendering most practical service to individual patients as directed by the local authority.

Your name is on file as a volunteer, and you are hereby requested to send your name and address to the State Department of Health, stating the earliest time you will be able to report for duty.

Signed:

As the need for nurses increased, exceeding greatly the number available, an additional call for women willing to nurse cases was sent forth.

State Capitol, Hartford, October 16—Women of Connecticut, even though they are not trained nurses, were to-day urged by the State Department of Health to volunteer their services for the duration of the Spanish influenza epidemic:

It was pointed out that because so many doctors and nurses have entered the national service, the state is short of both, and that since whole families are stricken with the epidemic, there would be need of women volunteers even if the normal number of doctors and nurses were available. Women, it was said, should volunteer their services through some central organization in their respective towns. Each woman should take charge of at least two families. They should see that the housework is kept up and meals prepared.

Without such help from the women of the state, Health Department officials said that the mental and physical suffering in many families would be beyond comprehension. One doctor declared that in one family he visited the father was found to have been suffering from influenza and to be extremely weak. Two children were suffering from whooping cough, complicated by grippe, the mother was in bed, prostrated by influenza, and at her side another child was dying. The doctor arrived late in the afternoon, and found that for forty-eight hours the entire family had been without medical attention, and that none of them had had anything to eat or drink since the previous day because they were too weak to leave their beds and prepare food. Before the mother was prostrated, she had cared for her sick husband and children despite her own illness.

"Consequently, the condition of her household when she was finally prostrated can better be imagined than described," said the doctor. The latter was asked what he did to relieve the situation.

"I did the only thing there was to do," he replied. "I rolled up my sleeves, lighted a fire, washed some dishes, cooked some cereal and gave the patients something to eat and drink. I then tried in other ways to relieve their physical condition, but it was too late to do much good. The baby died a few minutes after my arrival. The mother's condition is critical, and there is little hope for her recovery. The father's condition is worse, because of his grief. When I arrived, there was no outcry on the part of father or mother. Their attitude was one of resigned mental and physical suffering."

When this doctor made his next call he found a family of three—husband, wife and child. The mother was prostrated. Lying in bed beside her was her crying child, and in another room was the father, so delirious that the doctor had to lock him in while giving treatment to the mother and child. When the doctor returned to the father, the latter was dying.

"Such situations explain why women volunteers are needed," said the doctor.

Call Sent Out Through State Council of Defense

October 17, 1918

State Capitol, Hartford, October 17—At the request of the State Commissioner of Health, the woman's committee of the Connecticut State Council of Defense instituted a campaign to secure nurses needed in the fight against influenza, but found that only in a few cases could women be spared for work other than in their own community.

Using the census of nurses compiled in 1917, the woman's committee listed all trained and experienced nurses living in twenty-two of the larger

towns of the state, making a separate list for each town. These lists were sent to the chairman of the woman's committee of the towns concerned. The latter were Hartford, New Haven, Waterbury, Bridgeport, Norwalk, Norwich, Putnam, Stamford, Torrington, Ansonia, Berlin, Bristol, Danbury, Darien, Derby, Greenwich, Meriden, Middletown, Naugatuck, New Britain and New London.

With each list went a letter requesting each woman's committee chairman to organize an emergency committee. The latter was to check up the nurses listed to find out what each nurse was doing, and if not working, to urge her into service. Any nurse available for out-of-town service was to be asked to report to the State Health Commissioner, so that she might be placed by him in one of the emergency hospitals or in some other place particularly needing her service.

In spite of these appeals which were sent to several states, it was extremely difficult to get sufficient nurses to handle even the more serious cases.

However, during the epidemic 101 nurses and 48 physicians were secured from outside agencies as the Red Cross and the U. S. Public Health Service.

Of the 48 physicians, 21 were supplied by the U. S. Public Health Service between October 6th and 18th, and on the 26th of October, because of the spread of the epidemic westward, the Federal authorities requested that these physicians be released for emergency work elsewhere as soon as Connecticut did not need them. The physicians were distributed over the state in those towns and cities where they were needed the most, either taking the place of physicians who had gone to the war or assisting the few remaining behind who were overwhelmed with calls.

Physicians were assigned as follows:

Avon	3	Norwalk	1
Branford	1	Plainville	1
Bridgeport	6	Rockville	4
Bristol	3	Tariffville	1
Collinsville	2	Terryville	2
Derby	2	Thomaston	1
Georgetown	1	Wallingford	1
Meriden	2	Waterbury	13
Middletown	2	Watertown	1
New Britain	6	Westport	1
New Hartford	3	Willimantic	3
New Haven	2	Winsted	1
New London	1	Statewide	5

The nurses were assigned at once on reporting and as conditions lessened in severity in a town, they were transferred to a new section where their services were more needed.

State Department of Health nurses were assigned to towns and cities as follows:

Town or City	Nurses	Town or City	Nurses
Ansonia	1	Norwich	1
Avon	2	Plainfield	1
Branford	1	Plainville	1
Bridgeport	10	Putnam	5
Bristol	4	Rockville	5
Canton (Collinsville)	4	Seymour	3
Derby	1	Simsbury	6
Fairfield	3	Southington	2
Hartford	2	Thomaston	1
Litchfield	4	Torrington	1
Manchester	3	Wallingford	2
Meriden	5	Waterbury	5
Naugatuck	1	Watertown	2
New Britain	7	Westport	3
New Haven	15	Willimantic	1
New London	5	Windsor Locks	4
Norwalk	7		

The nurses were obtained from the following sources:

Private Agencies

Talcott Drug Company	1
W. W. Hunt Company	1
Volunteered	33
By private doctors	9
American Red Cross	
New England Division	15
Atlantic Division	15

Municipal and Federal Agencies

U. S. Public Health Service	3
U. S. Public Health Service (Ayer Section)	1
New Britain Department of Health	1
Municipal Hospital, Hartford	2
New Haven Department of Health	2
Other Sources	17

101

Of the 101 nurses, 69 were furnished to hospitals and 28 were in the field. Twenty-three nurses left Connecticut to go to Boston for influenza work on call of the Red Cross there.

The nurses worked 1,981 days and the physicians 1,238 days on state work. Complete records of physicians and nurses who were taken sick in the performance of their duty are not available, but the records show that one physician and seven nurses were infected with influenza while on epidemic duty.

In recognition of the efforts and sacrifices made by certain individual workers in the influenza epidemic, Governor Marcus H. Holcomb acknowledged the services of 36 doctors and 52 nurses by the following letter:

"December 5, 1918

"It has come to my knowledge that you have done splendid work in assisting the State of Connecticut in combating the ravages of the influenza epidemic. I desire to express to you, on behalf of the State of Connecticut, my sincerest appreciation for your prompt response and efficient service in our time of need.

Yours very truly,

(Signed) MARCUS H. HOLCOMB,
Governor."

Emergency Hospitals

Certain sections of the state were particularly hard hit and so swift was the spread of the disease that emergency hospitals were necessary to care for the cases.

Hospitals of this nature were established by the different communities in the following places, the State Department of Health keeping in touch with the progress of the epidemic and in this way being able to supply nurses and physicians to some of these hospitals:

Ansonia
Avon
Beacon Falls
Branford
Bridgeport
Bristol
Canton
Derby
Fairfield
Groton
Hartford
Meriden
Naugatuck
New Britain
New Haven
New London

Norwalk
Norwich
Rockville
Seymour
Simsbury
South Manchester
Stonington
Thomaston
Torrington
Wallingford
Waterbury
Westport
Willimantic
Windsor Locks
Winsted

The buildings used for emergency hospitals varied:

Examples of Buildings Used

Barracks Building
Private House
High School
Country Club
Lodging House
Church

Theatre
Armory
Parish House
Dance Hall
Fire House
Club House

Emergency Ambulance Corps

The State Council of Defense furnished a volunteer automobile

corps for all physicians and nurses of the State Department of Health during the epidemic with centers in Bridgeport, New Haven and Hartford.

State Capitol, Hartford, October 11—The Transportation Department of the Connecticut State Council of Defense, in coöperation with the Motor Messenger Corps, has arranged volunteer automobile transportation for doctors and visiting nurses of the State Department of Health during the epidemic of Spanish Influenza. Fourteen automobiles with drivers, have been secured for service between Hartford and towns in that section of the state. The Bridgeport and New Britain Boards of Health have been furnished with one car daily for a similar purpose.

The doctors sent from Hartford and Bridgeport act as inspectors. They investigate local epidemic conditions and report advisory emergency measures to Dr. John T. Black, State Health Commissioner.

Reports from the transportation department of the State Council are that automobile owners are anxious to aid the State Department of Health in the emergency and that in all cases responses to the requests for cars were immediate. In securing the cars the transportation department used the automobile census made last year.

Studies on Epidemic

Numerous surveys were made and outbreaks combated in various places, but complete records of all the work done were not made because of the necessity for carrying out the actual medical, nursing and field work, rather than require too much clerical work of professional workers, already overloaded physically.

It is unfortunate that this happened for it is always on facts written at the time events occur that new work should be based on like work and thus lay the foundation for efficient work in the future. Records and statistics are essential for accurate and efficient health work as in any other business.

Several localized epidemics were studied and surveys were made in Waterbury and New London of the prevalence of influenza cases.

Individual Outbreaks Studied

A study was made of the influenza outbreak in the St. Francis Orphan Asylum, in New Haven, where there were four hundred and sixty-four persons.

Because of influenza, no visitors had been allowed within the institution from October 1, 1918, up to the time the study was made on January 7, 1919, with the single exception of the School Supervisor, whose last visit was December 13th. Persons bringing Christmas gifts were not allowed to enter the building. The gifts were chiefly dolls, fruit, candy and other playthings.

No influenza cases were known to have existed prior to December 10th. One of the personnel was supposed to have had a slight attack of the disease about December 10th and on the 27th this

person became severely ill. Two others of the personnel apparently had cases about December 15th.

On Christmas Eve, December 24th, an entertainment was held for the children, but no outsider was allowed to be present. On the 26th, one child became ill and during the 27th there appeared one hundred and twenty-seven cases of influenza in the institution. Additional cases were reported daily thereafter until by January 7, 1919, there had been four hundred and twenty-four cases with seven deaths. Of this number three hundred and ninety-eight were children and twenty-six cases among the personnel.

Practically five per cent. of the cases in the children's group developed pneumonia, whereas among the adults thirty-five per cent. were followed by pneumonia.

The explosive character of the epidemic suggested the possibility of food as a cause and inquiry showed that one of the early cases among the personnel who was ill on December 15th had charge of the milk inspection at the institution, and it is possible that milk was the factor in the rapid spread of the infection. However, as others were ill with influenza at the same time, it is extremely doubtful that the epidemic could have been avoided, although the onset would not have been so widespread in character.

Another institutional outbreak that was studied was that of the Middletown State Insane Asylum where there was a resident population of 2,950, 312 of whom had influenza, or ten per cent. of the persons at the institution. The population was as follows:

Inmates	Male	1,237
	Female	1,333
Employees	Male	212
	Female	168
		2,950

The first case was diagnosed at the institution on October 3, 1918, and the following day four cases were found. The outbreak spread rapidly as will be seen by the following table:

Date	Cases	Deaths
October 3	1	0
October 4	4	0
October 5-11	25	0
October 12-18	99	0
October 19-25	53	3
October 26-November 1	41	4
November 2-8	12	3
November 9-15	33	11
November 16-22	12	2
November 23-30	6	0
December 1-30	26	2
Total	312	25

A survey of influenza cases was carried out in New Britain from December 3d to 6th, inclusive, in 1918, during which period 145 houses were visited in which 2,757 persons were living. Of this total 645 persons, or 24 per cent. had already been ill with influenza and 25 were fatal cases.

Group Summary

	Male	Female	Total
Dwellings	0	0	145
Number of persons	1,552	1,202	2,757
Cases	322	323	645
Fatal Cases	18	7	25

The survey covered the most congested portion of the city and included many different nationalities. The local board of health attempted to keep the schools, theaters, and public buildings open but was overruled by public opinion.

The New Britain General Hospital was converted into an emergency hospital and only surgical, influenza and pneumonia cases were admitted during the height of the disease.

Summary of Admissions to Hospital

Month	Cases	Deaths within 48 hours	Total Deaths
September	17	5	6
October	257	62	105
November	43	3	5
December	41	3	8
	358	73	124

There were instances as elsewhere in the state where entire families died of the disease. So many deaths occurred that it was necessary for the engineering department of the city to delegate employees for the purpose of digging graves at the local cemeteries.

After Care of Influenza Cases

In order to prevent complications following serious cases of influenza, work was carried on to furnish the necessary care and service to such cases. This service was started November 6, 1918.

The American Red Cross and all other unofficial agencies cooperated in this work and Miss M. C. Philips was placed in charge of this important phase of the epidemic. She organized the work placing volunteer agents in charge of seven districts into which the state was divided to facilitate the after-care activities. These agents were

Agent	Furnished by Organization
Miss Evangeline Lukens	Bridgeport Charity Organization
Mrs. Edwina B. Pim	New Haven Protective Association
Miss Alice Waldo	Conn. Children's Aid Society
Miss Caroline deF. Peniman	Conn. Industrial School for Girls
Miss Marjory Turner	Torrington Home Service Section
Miss Marjory Lyman	Hartford Charity Organization
Miss Mabelle C. Philips	American Red Cross

These agents worked through the 38 Red Cross Chapters in the State and its 270 branches.

It was hoped to obtain information from the chapters on the number of orphans and number of cases which needed after-care treatment, and cards were distributed for this purpose.

History Card

NAME	ADDRESS
No. in family	No. of Children under 16
Was father ill	DEATHS (Names)
Was mother ill	.....
Other members of the family ill	.....
Are all patients fully recovered	
Name of Physician	
Does family need	(1) Medical or Nursing Care
	(2) Relief or other assistance

History Card (Reverse Side)

To what extent has family income been affected

HOUSING No. of Rooms
Sanitation

Church affiliations

(After Care Influenza Record) Name of Visitor

By November 30th, 84 cards were returned which stated that 249 (none in large cities) persons were in need of this care.

The plan of the work was explained in a circular sent to each of the local committees.

The Chapters in Ansonia, Bridgeport, Jewett City, Litchfield, Middlesex County, Naugatuck, New London, Norwich, Wallingford, Waterbury, Danielson, Hartford, Manchester, Meriden, New Britain, New Haven, Southington, Stratford, Westport and Willimantic formed committees for this work.

In nine other towns, Bristol, Danbury, Fairfield, Greenwich, Rockville, Stamford, Taftville, Torrington and Winsted, there were other social organizations carrying on this work.

Nine chapters in the state failed to organize and assist in the after-care campaign.

Several conferences were held with different organizations to present the intended scope of the work and methods for carrying on successfully the campaign.

At the end of December, 112 more cards were returned, stating 1,434 more patients were in need of care and had been visited.

Doubtless these figures are all too low as far as actual work that was accomplished in the state is concerned, as they do not include the large cities, but they serve to indicate the great number in need of assistance.

Results

From the work carried on it was ascertained that there were 3,124 children who had one parent dead and 199 children with both parents dead of influenza. It was estimated that 2,809 were in need of some form of assistance and this was readily given by some local organization.

Results of Epidemic

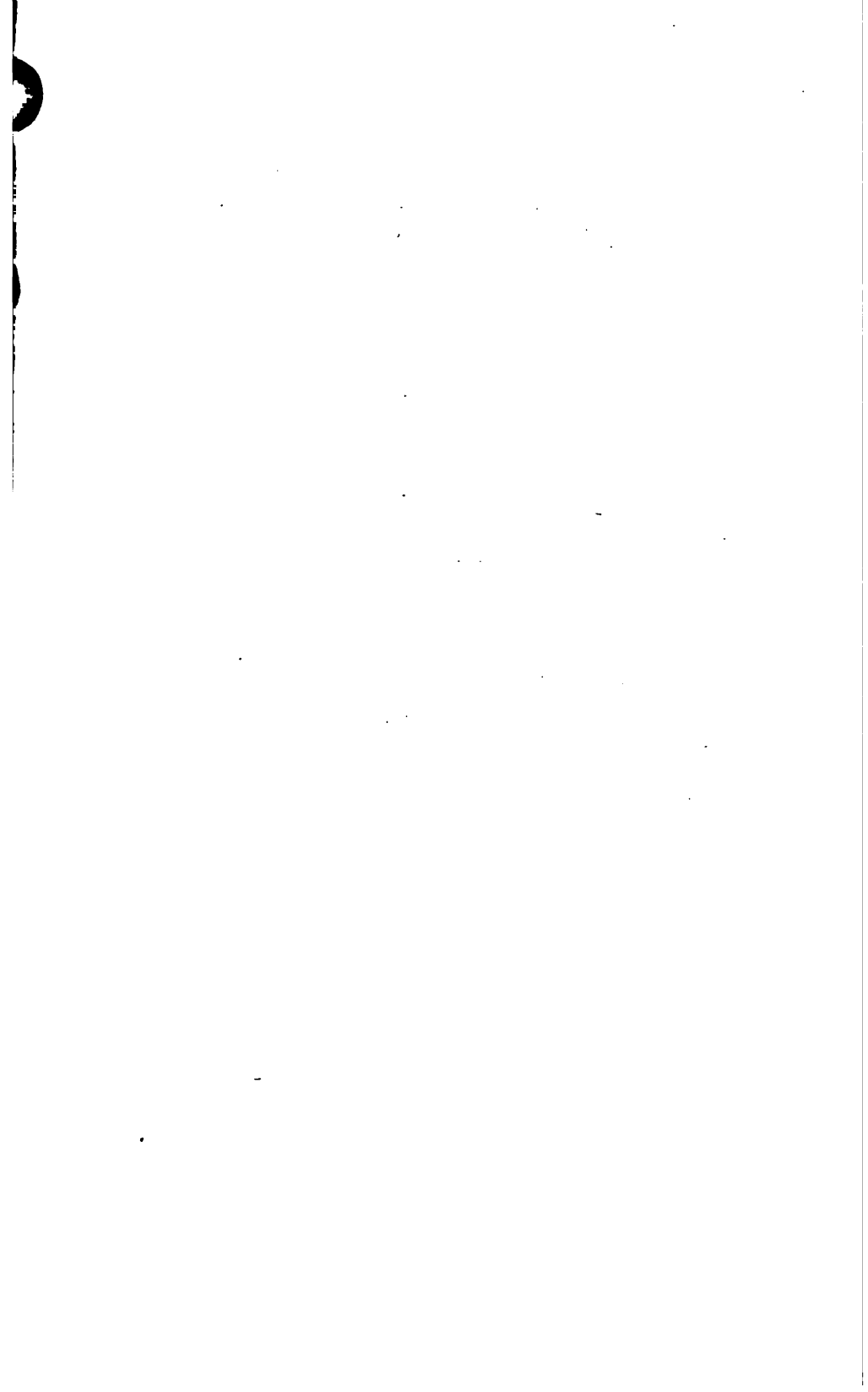
1. There were 115,567 cases and 8,907 deaths from influenza from August 1, 1918, to May 31, 1919.

2. There were 2,336 deaths from pneumonia from August 1, 1918, to May 31, 1919.

3. The closing of schools, theaters, churches and other public places had apparently no effect on diminishing the spread of the disease.

4. No influenza vaccine was found to be of any value as a prophylactic or in treating cases.

5. The epidemic showed the value of the newly organized State Department of Health in furnishing assistance to cities and towns in connection with the epidemic, both in field work and administrative matters.



REPORT OF DIVISION OF MENTAL HYGIENE

REPORT OF DIVISION OF MENTAL HYGIENE

Dr. John T. Black, Commissioner, Connecticut Department of Health.

Sir:—The past five months following the institution of the Division of Mental Hygiene in the Department of Health on February 1st, 1920, have been devoted to the study of various problems relating to the mental health of the people of this State. There are many factors involved in the conservation of mental health, the prophylaxis of nervous and mental disorders and improvement in the treatment of those suffering from mental disease or mental deficiency. These factors are important not only for economic, educational, industrial and social reasons, but greatest of all, because of the humanitarian principles involved.

Mental Hygiene is essentially a public health activity, involving as it does not only the science of mental medicine but also the legal procedures incident thereto. The treatment of mental disease is one of the greatest single enterprises in which the State is engaged and it is the greatest medical enterprise carried on within the borders of the State, for the number of beds in the hospitals for the insane is larger than the total number of beds in all other hospitals in the State.

The study undertaken by the Division of Mental Hygiene reveals an urgent need for a legally authorized, adequately financed, Bureau of Mental Hygiene, to coöperate with the State Hospitals, Department of Education, courts and penal institutions in a further study of mental disease and deficiency. Such a bureau should establish and maintain standards of care in both public and private institutions. The State Hospitals desire and need such coöperation, private institutions for the mentally ill require it. Such a bureau would be of great assistance to the Department of Education, and the provision of routine mental examination of suspected criminals, so many of whom are mentally irresponsible, would insure a more intelligent control of the greatest problems of criminality and delinquency.

One of the greatest needs at present is the provision of State care for all of the mentally afflicted. Under the present system whereby each community pays a certain, though inadequate, proportion of the cost of maintenance of paupers committed to State Hospitals from the community, results in many mentally diseased individuals being deprived of treatment. If the State assumed all financial responsibility for the treatment of the mentally ill, as is done in some other progressive states, such unfair and poorly advised discrimination could not exist.

I also respectfully suggest that the health officers be authorized

to institute procedures for the commitment of mental patients and that they be relieved of financial responsibility in making application for such commitment to State Hospitals.

The Bureau of Mental Hygiene should have the right to investigate conditions in local almshouses to ascertain if mentally ill individuals are being unlawfully detained in such institutions and to institute measures to have such patients promptly transferred to State Hospitals. It should also be the duty of such a bureau to compile statistics showing the incidence of mental disease and deficiency in the State, to make surveys and study special problems, and to conduct a conservative but intensive campaign of education.

I respectfully suggest that such a Bureau of Mental Hygiene be instituted as soon as possible and that a budget of at least six thousand dollars a year be set aside for its maintenance. This would pay the salary of a supervising psychiatrist working on a part-time basis, a secretary, a stenographer, as well as traveling and other incidental expenses.

Respectfully yours,

WM. B. TERHUNE, M.D.

A SURVEY OF PUBLIC SCHOOLS

A SURVEY OF PUBLIC SCHOOLS

The examination of men for our selected army during the war clearly demonstrated that sufficient work had not been done to safeguard the physical condition of our people during the growing period of their lives. Nearly one-third of the men examined were found physically incapable of standing the strain of the work which was delegated to them. The examination demonstrated that many of the defects which disqualified the men called to the Service were the results of childhood diseases, and that the majority of these defects could have been prevented or partly corrected, if not entirely remedied, providing proper medical school inspection had been available during the years when they had attended school.

There are estimated to be 300,000 children of school age in Connecticut, 55,000 of whom are not enrolled in the schools of the state. Some of these have entered higher colleges, many have graduated from grammar or high schools; but it is feared that others have been deprived of a part of their education because they had to go to work to assist their parents. There are 54,000 children enrolled in the schools of the state who at the time of the survey were not attending school. These children were found to be absent for various reasons, such as being ill with some communicable disease, correctable physical defects or other conditions which tended to retard their training.

A partial survey of the schools was undertaken by the State Department of Health during the last four months of 1919 at the suggestion of the State Board of Education. It was extremely unfortunate that lack of funds and personnel restricted the work so that it was carried out in only seventy-five of the 168 towns (townships) of the state. The list of these towns is as follows:

LIST OF TOWNS WHERE SCHOOL SURVEY HAS BEEN MADE

Fairfield County

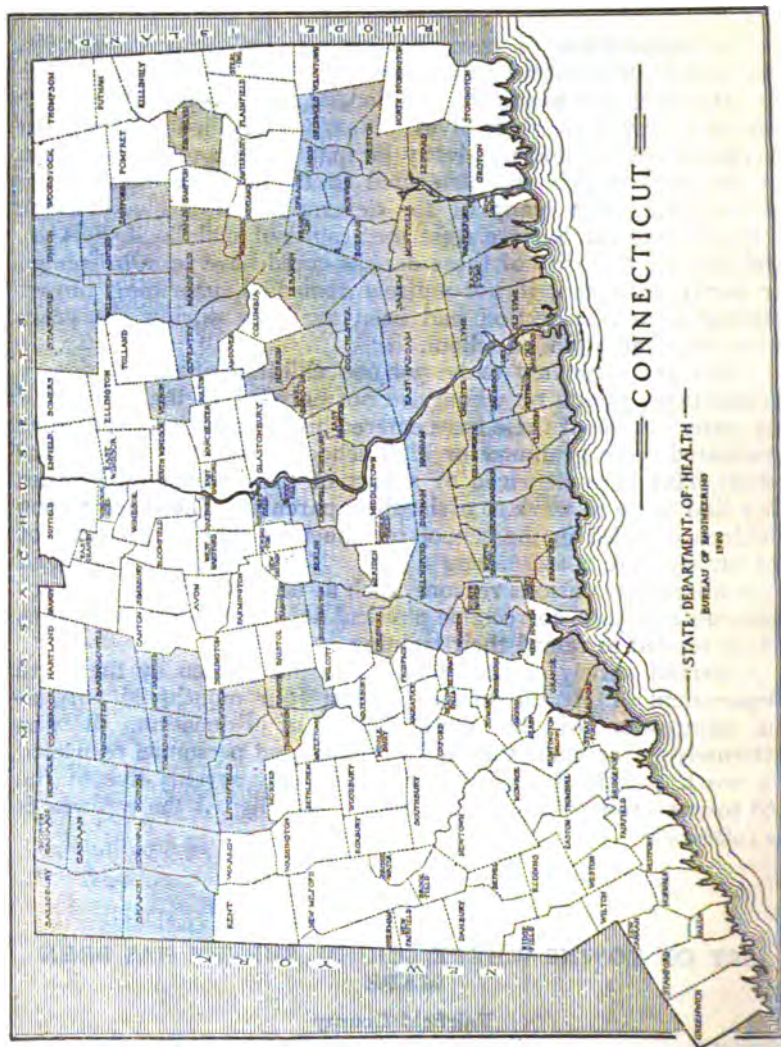
Stratford

New London County

Bozrah
Colchester
East Lyme
Franklin
Griswold
Lebanon

Ledyard
Lisbon
Lyme
Montville
Norwich
Old Lyme

Preston
Salem
Sprague
Waterford



LIST OF TOWNS WHERE SCHOOL SURVEY HAS BEEN MADE (continued)

Middlesex County

Chester	Deep River (Saybrook)	Middlefield
Clinton	East Haddam	Old Saybrook
Cromwell	Essex	Westbrook

New Haven County

Branford	Hamden	Orange
Cheshire	Madison	Wallingford
East Haven	North Branford	West Haven (Orange)
Guilford	North Haven	

Litchfield County

Barkhamsted	Litchfield	Sharon
Canaan	New Hartford	Thomaston
Colebrook	Norfolk	Torrington
Cornwall	North Canaan	Winchester
Goshen	Plymouth	
Harwinton	Salisbury	

Tolland County

Coventry	Mansfield	Vernon
Hebron	Stafford	Willington

Hartford County

Berlin	Plainville	Southington
Marlborough	Rocky Hill	Wethersfield

Windham County

Ashford	Chaplin	Windham
Brooklyn	Eastford	
Canterbury	Hampton	

There were 423 schoolhouses inspected. The attendance at these schools numbered 35,431 children; the number of rooms being 1,138, with an average of 31 children to a room. It is estimated that the statistical information collected covers approximately one-sixth of the school population of Connecticut.

A special form on inspection of school buildings was filled out by the employees of the Department who carried on the school survey. This form covered the data given below.

INSTRUCTIONS FOR INSPECTION OF SCHOOL BUILDINGS

1. Name of school
2. Location in detail
3. Name of Chairman of School Board, or member supervising
4. Name of Principal and names of all teachers, with number of room assigned to each
5. Average attendance for building and for rooms, indicating number of the room
6. General description of the building—
 - (a) Construction, age of building.
 - (b) Layout
 - (c) Relative location, with diagram showing surroundings
7. Condition of building including cellar
8. Size and condition of playgrounds
9. Relative location and distance from school of well and toilets
10. Water supply—
 - (a) Source
 - (b) Summary of last analysis, with date
 - (c) Type of well (dug or driven, with depth)
11. Drinking facilities—
 - (a) Individual cups
 - (b) Covered pail
 - (c) Care of pail
 - (d) Drinking fountains
12. Washing facilities—
 - (a) Source of water
 - (b) Basin
 - (c) Type of sink
 - (d) Common towel
13. Descriptions of toilets—
 - (a) General condition of toilets
 - (b) Condition of buildings and of vaults
14. Schoolroom—
 - (a) Ventilation
 - (b) Lighting
 - (c) Heating
 - (d) Arrangement of seats
15. Schoolroom Sanitation—
 - (a) Method of cleaning (dry sweeping)
 - (b) Do children assist in cleaning schoolroom?
16. Cloak Room—
 - (a) Ventilation
 - (b) Heating
 - (c) Provision for drying clothes of children exposed to inclement weather
17. Transportation of school children
18. Medical School Inspection—
 - (a) Physician in attendance
 - (b) Frequency of physician's visits
 - (c) School nurse
 - (d) Method of physical examination
 - (e) Dental inspection
19. General welfare of children—
 - (a) How many bring lunches
 - (b) Provision for warm lunches
 - (c) Instruction in hygiene and sanitation
 - (d) Common use of pencils

The compilation of this material showed that seventy-five per cent of the school buildings were surrounded by adequate yards while five per cent had no yards, the children being obliged to seek their recreation before school, during recess and after school, in the street or on adjoining private land. Most of the school yards were well kept, but approximately five per cent were reported as being in an untidy and insanitary condition, which would obviously have its effect on the mind of the child and influence his habits at home. It was rare that a school was found where children were assisted in their play by proper instruction or apparatus furnished to promote the physical development of the child. Children attending school are in the growing period of their lives and need sufficient area in which to play at recess after being confined in a schoolroom, which is an abnormal condition for them. It has been found that children learn much easier when they are allowed to exercise during recess periods interspersed between their study hours.

Slightly over ten per cent of the buildings were located on hilly ground, whereas approximately five per cent were on low ground, the location in certain instances apparently being selected without much thought as to the effect it would have on the children attending the school.

Practically ten per cent of the schools having playgrounds had grass covered yards and an equal number had gravel playgrounds.

The data collected on school building construction showed that wood was used in building eighty-three per cent of the school buildings, with brick or stone in the remainder. Thirty-three per cent of the buildings were found in bad condition and needed many repairs. Sanitary conditions were found to be poor in thirty per cent of the schools. Wherever conditions were found to be extremely insanitary, recommendations were forwarded to the school authorities in charge of the building. It is the duty of the school to teach home hygiene and habits of living which are creditable and beneficial, and for this reason alone it would seem that the schools of the state should be in a sanitary condition second to none.

The condition of lighting was considered as good in over eighty per cent of the schools.

Many of the towns covered by the survey contained small rural communities, so that sixty-eight per cent of the schools were found to have only one floor; in fact, the one room schoolhouse predominated, fifty-eight per cent of the schools having but one room. Fifteen per cent were found to have two rooms. Collectively, the schools averaged three rooms each, and with the larger schools, the five and eight room building predominated.

The toilet facilities of the schools were found to be satisfactory in most of the large buildings. Practically all of the buildings of

five rooms or more contained inside toilets, but half of these were found to be of old type and not satisfactory from the present standpoint of toilet construction. Thirty-three per cent of the inside toilets were found in poor condition, either broken or out of order, and many of these were particularly insanitary and were recommended not to be used until thoroughly cleaned. The school buildings containing four rooms and under had outside toilets in most cases and twenty-five per cent of these toilets were built without vault construction. Practically fifty per cent of the outside toilets or privies were in a dilapidated condition and even a larger percentage were in such an insanitary state as to be a serious menace to the health of the children using them, particularly when one considers the opportunity for the breeding of flies accompanied by the spreading of infection by these insects.

It is now well known that schoolrooms must be ventilated or children will not progress satisfactorily in their work. It was found that seventy-one per cent of the schools were dependent upon open windows for ventilation and thirty-three per cent used board window deflectors. This method of ventilation, if properly carried out and understood by teachers, can be made satisfactory, but it is not recommended for the larger school buildings. The condition of the schoolroom air as recorded by the investigators was satisfactory in sixty-nine per cent of the schools. In the remaining thirty-one per cent, the air was sufficiently foul to be recorded.

The temperature of a schoolroom is an important factor in the efficiency of class work. If the room is cool, the scholars can do good work if warmly clothed, but in over-heated rooms the children become sleepy and lose all acuteness of intellect and perception. In twenty-five per cent of the classrooms the temperature was seventy-two degrees, or over. This was due in some cases to necessary climatic conditions, but in other instances it was the result of overheating of the building by the janitor in charge. In three per cent of the classrooms, the temperature varied between fifty-eight and sixty degrees, a lower temperature than should customarily be kept where children are clothed in the ordinary way. It was found that thirty-six per cent of the schoolrooms had no thermometers. All schoolrooms should be supplied with thermometers in order that the proper temperature may be kept.

The larger schools, particularly those of more than one story in height, used coal as fuel. The smaller schoolhouses, especially in rural sections, used wood or coal in stoves, some of which were found in a state of disrepair. Because of the carelessness of the person in charge of the stove, the small schoolhouse has frequently been burned down. The fire risk as it existed in the schools was found in a general way to be great, for sixty-three per cent of the

schools showed no protection was taken against fire. Only eight per cent reported having fire drills. Eleven per cent were furnished with fire escapes and twenty-two per cent were supplied with fire extinguishers of various kinds. Fire hose was supplied in only eight schools, or about two per cent. Since thirteen per cent of the schools surveyed were of three stories and nine per cent contained ten rooms or more, these conditions, needless to say, present possibilities of a conflagration.

It has been found that posture has much to do with the comfort and welfare of the scholar. Of the four hundred rooms reported in which the seating facilities were recorded, it was found that only twenty-three per cent were provided with adjustable seats and desks. Many of the schoolrooms were supplied with double seats, which provide an easy way for the transmission of communicable disease from one child to another.

A safe water supply is absolutely essential in all schools, for it is practically certain that children will drink whatever water is furnished at the school. A municipal water supply was furnished at twenty-six of the schools covered by the survey. Sixty per cent of the remainder obtained their water from wells and fourteen per cent from springs. The schools which obtained their water from wells were found to depend upon private wells in over half of their number, some child being designated to bring water to the school each day in a bucket or other container, a very dangerous practice unless properly supervised by the teacher. Analyses were made of the water from wells supplying the schools and sixteen per cent were found to be in bad condition, polluted and dangerous. Thirty-five per cent of the schools had bubble fountains, practically half of which were not in working order. Nine per cent of the schools used water from open tin water pails exposed to dust and contamination by the pupils when dipping water from the container.

The individual drinking glass or cup has not yet reached all of the schools in the state, however; twenty-nine per cent of the schools were supplied with paper drinking cups and sixteen per cent with individual glasses, whereas twenty-one per cent had no individual cups of any kind. The remaining schools had bubble fountains, with the exception of two per cent where the children were required to drink out of their hands, and five per cent where the children folded their own cups from paper.

Washing facilities at the schoolhouses were noticeably lacking, certain of the schools having no conveniences at all. Approximately fifty per cent used hand basins, and of this number twenty-five per cent were in an insanitary condition. Less than thirty-three per cent of the schools were equipped with sinks for washing, and the condition of the majority of the sinks was no improvement over the hand basins. It was particularly gratify-

ing to find that paper towels were supplied in about sixty per cent of the buildings. In about five per cent, individual cloth towels were used, but in eight per cent or, to be exact, thirty-two schools, that ancient relic, the common roller towel, was in use. The roller towel was found to be one of the chief means whereby practically all kinds of infection were spread among school children and, needless to say, this was one of the most remarkable insanitary conditions found to exist in the schools during the survey.

Bar soap was supplied in fifty-three per cent of the schools, liquid soap in six per cent and no soap of any kind in the remainder. Good soap that is not too harsh for tender skin, safe towels and clean washing facilities are a necessity for safe school management and an example in teaching Americanism.

Fourteen per cent of the schools claimed medical inspection by physicians; the school nurse carried out the inspections in four per cent and the school physician is called when a contagious disease is suspected in about ten per cent. In the remaining seventy-two per cent of the schools covered, the teachers were reported as making inspections for the presence of diseases. An average of two visits a year was reported for schools having medical inspection by physicians and the school nurses were found to average twenty-five visits a year to the schools, usually on a periodic program.

Instruction in hygiene was given in seventy-two per cent of the schools, one-tenth of which used text books in hygiene. In twenty per cent, no instruction whatever was given in hygiene. About twenty-five per cent used health charts for illustrating the lessons. At four schools, less than one per cent, health clubs had been formed.

LIST OF CONNECTICUT HEALTH OFFICER

LIST OF CONNECTICUT HEALTH OFFICERS

COUNTY HEALTH OFFICERS

<i>County</i>	<i>Name</i>	<i>P. O. Address</i>
Hartford	Daniel A. Markham, Esq.	Hartford
New Haven	J. Frederick Baker, Jr., Esq.	New Haven
New London	Arthur M. Brown, Esq.	Norwich
Litchfield	William W. Bierce, Esq.	Torrington
Fairfield	James A. Marr, Esq.	Bridgeport
Middlesex	M. Eugene Culver, Esq.	Middletown
Tolland	M. D. O'Connell, Esq. ..	Stafford Springs
Windham	William A. King, Esq. ..	Willimantic

TOWN, CITY AND BORO HEALTH OFFICERS

<i>Town</i>	<i>Name</i>	<i>P. O. Address</i>
Andover	H. A. Thompson	Andover
Ansonia	Frederick C. Goldstein, M.D.	Ansonia
Ashford	George O. Balch	Warrenville
Avon	C. N. Woodford, M.D.	Avon
Barkhamsted	Herbert Case	Barkhamsted
Beacon Falls	Charles D. Roberts	Beacon Falls
Berlin	R. M. Griswold, M.D.	Kensington
Bethany	S. G. Davidson	Bethany
Bethel	H. F. Moore, M.D.	Bethel
Bethel (boro)	H. F. Moore, M.D.	Bethel
Bethlehem	G. A. Benjamin (actg.) ..	Bethlehem
Bloomfield	G. F. Woodford	Bloomfield
Bolton	J. White Sumner	Bolton
Bozrah	E. S. Abel	Bozrah
Branford	A. S. McQueen, M.D.	Branford
Branford (boro)	A. S. McQueen, M.D.	Branford
Bridgeport	Wm. H. Coon, M.D.	Bridgeport
Bridgewater	Mary C. McIntyre, M.D. (actg.)	Roxbury
Bristol	J. I. Woisard, M.D.	Bristol
Bristol (city)	J. I. Woisard, M.D.	Bristol
Brookfield	Chas. A. Ryder, M.D.	Brookfield Center
Brooklyn	E. C. Babson	Danielson
Burlington	John D. Luby	Bristol, R. F. D. 3
Canaan	Isaac P. Hornbeck	Falls Village
Canterbury	Levi N. Clarke	So. Canterbury
Canton	C. J. Kilbourn, M.D.	Collinsville
Chaplin	F. C. Lummis	Chaplin
Cheshire	C. N. Denison, M.D.	Cheshire
Chester	F. Sumner Smith, M.D.	Chester
Clinton	D. A. Fox, M.D.	Clinton
Colchester	T. S. Rathbun	Colchester
Colchester (boro)	T. S. Rathbun	Colchester
Colebrook	H. L. Culver	Winsted, R. F. D. 1

<i>Town</i>	<i>Name</i>	<i>P. O. Address</i>
Columbia	R. L. Cobb	Columbia
Cornwall	R. J. Grand-Lienard, M.D.	West Cornwall
Coventry	W. L. Higgins, M.D.	So. Coventry
Cromwell	C. E. Bush, M.D.	Cromwell
Danbury	G. E. Lemmer, M.D.	Danbury
Danbury (city)	G. E. Lemmer, M.D.	Danbury
Darien	G. H. Noxon, M.D.	Darien
Derby	E. O'R. Maguire, M.D.	Derby
Durham	E. A. Markham, M.D.	Durham
Eastford	C. T. Latham	Phoenixville
Easton	Daniel M. Edwards	Stepney, R.F.D. 15
East Granby	F. H. Dibble	East Granby
East Haddam	M. W. Plumstead, M.D.	East Haddam
East Hampton	G. N. Lawson, M.D.	Middle Haddam
East Hartford	F. H. Mayberry, M.D.	East Hartford
East Haven	E. C. M. Hall, M.D.	New Haven
East Lyme	F. H. Dart, M.D.	Niantic
East Windsor	C. W. Robertson, M.D.	Broad Brook
Ellington	J. E. Flaherty, M.D.	Rockville
Enfield	G. T. Finch, M.D.	Thompsonville
Essex	F. B. Bradeen, M.D.	Essex
Fairfield	L. E. Poole, M.D.	Fairfield
Farmington	Stuart E. Phelps, M.D.	Farmington
Farmington (boro)	Stuart E. Phelps, M.D.	Farmington
Franklin	Chas. B. Davis	Franklin
Glastonbury	C. G. Rankin, M.D.	Glastonbury
Goshen	Carrie N. Stevens, M.D.	Cornwall
Granby	Wesley N. Clark	Granby
Greenwich	A. E. Austin, M.D.	Greenwich
Greenwich (boro)	A. E. Austin, M.D.	Greenwich
Griswold	G. H. Jennings, M.D.	Jewett City
Jewett City (boro)	G. H. Jennings, M.D.	Jewett City
Groton	Louis M. Allyn, M.D.	Mystic
Groton (boro)	F. W. Hewes, M.D.	Groton
Guilford	F. DeWitt Smith, M.D.	Guilford
Guilford (boro)	F. DeWitt Smith, M.D.	Guilford
Haddam	Dr. T. P. Walsh (actg.)	Middletown
Hamden	Geo. H. Joslin, M.D.	Hamden
Hampton	Rev. Chas. D. Fogg	Hampton
Hartford	C. P. Botsford, M.D.	Hartford
Hartland	Edward A. Gaylord	Hartland
Harwinton	H. B. Hanchett, M.D.	Torrington
Hebron	J. Banks Jones	Andover, R. F. D. 2
Kent	E. W. Bull	Kent
Killingly	W. H. Judson, M.D.	Danielson
Danielson (boro)	W. H. Judson, M.D.	Danielson
Killingworth	D. A. Fox, M.D.	Clinton
Lebanon	W. T. Curry	Leonard's Bridge
Ledyard	J. A. Stoddard	R. F. D. 1, Gales Ferry
Lisbon	Chas. D. Wolf	Jewett City
Litchfield	Wm. E. Turkington	Litchfield
Bantam (boro)	George Burgoyne	Bantam
Litchfield (boro)	Wm. E. Turkington	Litchfield
Lyme	J. G. Ely, M.D.	Hamburgh
Madison	M. P. Rindge, M.D.	Madison
Manchester	D. C. Y. Moore, M.D.	So. Manchester
Mansfield	E. H. Marsh, M.D.	Mansfield Center

<i>Town</i>	<i>Name</i>	<i>P. O. Address</i>
Marlborough	Wm. W. Bolles	Marlborough
Meriden	E. A. Wilson, M.D.	Meriden
Meriden (city)	Joseph A. Cooke, M.D.	Meriden
Middlebury	F. S. Chamberlain	Middlebury
Middlefield	Chas. E. Zink, M.D.	Middletown
Middletown	T. P. Walsh, M.D.	Middletown
Middletown (city)	T. P. Walsh, M.D.	Middletown
Milford	W. S. Putney, M.D.	Milford
Monroe	S. B. Hayes	Stepney
Montville	M. E. Fox, M.D.	Uncasville
Morris	E. R. Skilton	Morris
Naugatuck	Walter I. Baker, M.D.	Naugatuck
Naugatuck (boro)	Walter I. Baker, M.D.	Naugatuck
New Britain	J. R. Harris, M.D.	New Britain
New Canaan	M. J. Brooks, M.D.	New Canaan
New Canaan (boro)	M. J. Brooks, M.D.	New Canaan
New Fairfield	Everett J. Scofield, M.D.	Danbury
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Shelton	G. A. Shelton, M.D.	Shelton
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Southbury	Wm. H. Wakelee	Southbury, R. F. D. 1
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Stafford Springs	F. L. Smith, M.D.	Stafford Springs
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Sterling	F. W. Hazard (actg.) ..	Oneco
Stonington	C. F. Congdon, M.D.	Mystic
Stonington (boro)	C. F. Congdon, M.D.	Mystic
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Thompson	Oscar Munyon	Thompson
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Torrington (boro)	Elias Pratt, M.D.	Torrington
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Waterford	G. M. Minor, M.D.	Waterford
Watertown	Chas. W. Jackson, M.D.	Watertown
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West Hartford	R. W. E. Alcott, M.D.	West Hartford
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Woodstock	Joseph Spalding, M.D.	Woodstock
Westport	E. S. Brodsky, M.D.	Westport

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State of Connecticut
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ANNUAL REPORTS
OF THE
Board of Education of the Blind
TO
THE GOVERNOR
FOR THE TWO YEARS ENDED JUNE 30
1920

PRINTED IN COMPLIANCE WITH STATUTE

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1920

PUBLICATION
APPROVED BY
THE BOARD OF CONTROL



PRESENT MEMBERS
OF THE
STATE BOARD OF EDUCATION OF THE BLIND

MARCUS H. HOLCOMB, GOVERNOR, SOUTHTON.

SAMUEL O. PRENTICE, CHIEF JUSTICE, HARTFORD.

EDWARD M. DAY, HARTFORD.

Mrs. T. BELKNAP BEACH, HARTFORD.

STETSON K. RYAN, MIDDLETOWN, SECRETARY.

*OFFICE OF THE BOARD,
ROOM 74, STATE CAPITOL,
HARTFORD, CONNECTICUT.*

Office of the Board of Education of the Blind,

Room 74, State Capitol, Hartford, Conn.

To His Excellency, Marcus H. Holcomb, Governor:

SIR:—In compliance with the statutes, we have the honor to submit herewith the annual reports of the Board for the two years ended June 30, 1920.

Respectfully submitted,

MARCUS H. HOLCOMB,

SAMUEL O. PRENTICE,

EDWARD M. DAY,

MARY M. BEACH.

ANNUAL REPORT

OF THE

BOARD OF EDUCATION OF THE BLIND

For the year ended June 30, 1919.

The period of stress during and following the world war has seemed to hold out promise to those who are physically handicapped. A higher sense of responsibility upon the part of government has been shown, while the public has come to recognize that the health, happiness and economic welfare of those who have not the full use of all their capacities is a public asset that has not been fathomed.

Those without sight have not been slow to recognize this new expression of concern. They have been immeasurably quickened by a sense of hope, and some of the feeling of bitterness, which had rested hamperingly upon their attitude toward their fellows, has been put to an end. They are looking expectantly to the day when the world shall realize that blindness does not classify, but that persons without sight possess individuality and are able to employ their special gifts of intellect or of training to real advantage, if they are given a reasonable opportunity to do so.

This quickening of public interest in the welfare of the blind has placed increased responsibility upon the agencies which are working in their behalf. If the public is manifesting a neighborly interest in what is best for the blind, and is showing a friendly determination to give the blind man and woman a place in industry

and in the normal activities of the community, the person who is blind must be more than ever ready to cope successfully with the enlarged opportunities which are opening to him. The spirit and the intelligence with which a commonwealth like ours moves to meet these calls, upon its saneness of vision and its depths of heart, is of immense importance.

MORE BLIND PEOPLE BEING EDUCATED

The State of Connecticut has never had more persons without sight, both children and adults, who were receiving educational advantages under its direction than during the period which is under review. A total of 83 blind persons, of whom 19 were adults, were entered by this Board in various educational institutions in this state and elsewhere for the yearly period ending June 30, 1919. This increased enrollment is accounted for partly by the accelerated growth of the state during the past five years, and in some measures by the newly awakened consciousness upon the part of relatives, friends, public agencies and officials, and the blind themselves, that it is imperative that the facilities which the state provides should be used by the blind wherever it is found to be practicable. As an outcome of this feeling, the Board has enjoyed from many sources a helpful co-operation that has resulted in its increased usefulness.

The three-fold capacity in which the Connecticut Institute for the Blind has served the state for a score of years, while proving confusing to some who persist in thinking of the nursery at Farmington, the school at Hartford, and the trades department at Wethersfield as distinct institutions each with a separate board of directors, has elicited from leading educators in work for the blind, who have visited the state, a serious interest that has resulted in praise for the manner in which the work is provided for in Connecticut. While the Connecticut Institute for the Blind, with its three separate institutions is not, strictly speaking, a state institution, the state has given generous aid and provided the funds with which were erected both the school for children and the trades department for adults at Wethersfield. The state has a lien upon both these buildings.

TUITION CHARGES RAISED

Although the Connecticut Institute for the Blind has a small endowment fund, and appeals to the public for subscriptions, its work is carried on largely through the tuition which this Board pays for the pupils whom it sends there. In the past, through careful management, the directors of the Connecticut Institute for the Blind have been able to conduct the work without a deficit, with what the state has paid in the form of tuition, supplemented by a small income from its endowment and what the public subscribed. With the unusual financial conditions which have prevailed for several years, however, the economy and good management which proved adequate in the past have not been equal to the increasing demands. A deficit accumulated, in spite of the careful oversight of the directors. It was necessary, therefore, for the state to come to the assistance of the hard-pressed institution and to help it to meet its obligations. It became increasingly obvious to the State Board of Education of the Blind, therefore, that there was urgent need of a larger income if the various departments of the work were to maintain the standards which have been established. In the meantime, the Perkins Institution for the Blind at Watertown, Mass., where the Board for years has entered some of its pupils, informed the Board that the tuition there had been raised from \$300 to \$400 a year. Facing these insistent demands, the Board appeared before the General Assembly, which was convened in 1919, and asked that the sum of \$300 which it was authorized to expend for the education of each blind child or adult in any one year, be increased to a maximum sum of \$450 a year. The request was granted, and it is expected that this amount will prove adequate.

THE SCHOOL DEPARTMENT

As usual, the School for the Blind at Hartford has had a greater enrollment of state pupils than any other one institution. Forty-nine boys and girls were maintained there by the Board during the year. The work which this institution is doing parallels largely the work of the public schools, up to and including the first year of high school work. State pupils who have been graduated from the School for the Blind in this state are sent to Perkins Institution at Watertown, Mass., if they have the neces-

sary qualifications, where they remain for several years and complete what, in general terms, is nearly the equivalent of a high school course. Although a course in piano tuning, which makes an especially desirable profession for some blind boys, has been established at our state school, what is offered there is not as yet sufficient to fit a young man to take his place in the world as a proficient tuner. Connecticut is, therefore, for the present depending upon the excellent facilities which the tuning department at Perkins Institution for the Blind offers to the blind youth to perfect its boys, who seem qualified, in this calling. Four of the five boys who were present at Perkins in 1918-1919, as state pupils, were supplementing their academic work with a course in the tuning department. During the school year one of them was deemed ready to take his place in the world as a wage earner and, through the secretary of this Board, a position was obtained for him in a music store in Waterbury. It is pleasing to note that he gave unusual satisfaction and that his wages were increased and the firm finally sent him at its own expense to a school in New York city to learn to care for player pianos. He completed the course there with the highest rating that had ever been awarded at the school and then returned to his former employers.

PUPILS AT TRINITY COLLEGE

After careful consideration the Board voted, in the summer of 1918, to aid in the education of two young men at Trinity College, at Hartford. Both were former state pupils, one being a graduate of Perkins Institution for the Blind and the other of the New York School for the Blind, in New York City. One had no sight; the other a little useful vision. Each had in mind the possibility of fitting himself as a teacher. President Flavel S. Luther and the members of the Trinity College faculty co-operated heartily for the well being of these young men. It was with distinct pleasure that the Board noted that one of its pupils, the one who had no sight, was able to render conspicuous service to the government and the college authorities, during the life of the Student Army Training Corps at Trinity. Learning that the military officer in charge of the corps was finding it hard to secure a competent person to blow the bugle calls, this student presented himself at the room of the colonel and volunteered his services. His work was

found so satisfactory that for some days all the calls, more than a score, were blown by him and he was then placed in charge of the squad of buglers, with the understanding that the responsibility for the sounding of all the calls in the future was to rest with him as commander of the squad. This young man continued to act in the capacity named until the corps was disbanded. It was in securing readers for these two students at college that the Board was able to render most helpful financial assistance. Helping a young person to a college education is a work which the Board had never before undertaken, and the vote to do so seems significant of a new desire to render help in a specialized form, where there is good reason to believe that a blind person would profit by it.

THE TRADES DEPARTMENT

At the trades department at Wethersfield new impetus has been gained. A. L. Curado came as superintendent in the fall of 1918. He has been able to strengthen the broom making department beyond what it has ever been. He has instituted rag weaving for the women. An invigorated spirit of industry pervades the place. The farm has been worked to good advantage. Improved business methods have been introduced. One of our former state pupils, Miss Mae L. Ferguson, of Danbury, who was a school teacher before she lost her sight, has been given full charge of the work in the Braille and typewriting. These classes are conducted in the evening and are open to all the blind people at the institution. Through the efforts of one of the members of this Board the school room has been provided with a complete quota of Underwood typewriters. This has enabled Miss Ferguson to do commendable work with difficult pupils. One finds a blind man who has only the stumps of several fingers on one hand writing letters on the typewriter. With several foreigners, who with difficulty make themselves understood in English, this teacher has had marked success. In June an exhibition was held at the institution, which was visited by a considerable number who gained thereby knowledge and a new interest in the work.

During the year several of the state pupils left to establish themselves in business. One has opened a cigar store in Williman-

tic and is doing well. Another has started a broom shop in Danbury. He is happy in the work and is grateful for the hopeful outlook which his stay at the trades department has given him. A third became a typist in the employ of a professional man. In each case the Board was able to give assistance in the way of equipment through the statute which permits the Board to aid each pupil, who has learned a trade, to the extent of \$200 in establishing themselves in business.

HOW SOME EARN THEIR LIVING

It is with a sense of thankfulness that the Board is able to look back over the year and to note that real progress is being made by our people. One of our young men is the sales agent for the trades department at Wethersfield, and is visiting the large factories in the state soliciting orders for the brooms which are made by the blind at the institution. His sales have been good. Soon he was disposing of more brooms than the institution could produce. Arrangements were then made for him to sell also for the Indiana Workshop for the Blind. He now has a bank account and is looking forward to other enterprises. Another of our pupils is playing the trombone in the orchestra at a moving picture theater. Some are doing good work at chair caning. Several own stores. Some are working in factories. A few tune pianos. Others are canvassers. One is employed in a New Haven office. Numbers are housekeepers, doing the cooking, washing and simple mending with commendable success. As one comes in touch with these people, who are both brave and cheerful, it is apparent that blindness is not an insurmountable handicap. Given a reasonable amount of common sense, judgment, persistency, thrift and good health and a considerable percentage of those who have lost their sight can succeed. Each case, however, differs from the other. It is for the Board to study each case as best it can, and help in the way that appears best for that individual.

HOME TEACHING

Sometimes it is not found practicable for a blind person to leave his home to learn a trade. It is here, in selected cases, that the home teacher may prove useful. Connecticut has not been quick to encourage this form of teaching. When the need ap-

peared, however, the past year, special arrangements were made to provide instruction in the home. An intelligent young man who had no sight was secured to give part time to the work. His efforts were helpful and it is felt that the state has made a beginning. If there appeared to be especial need of such a teacher in any locality at any time the Board would probably arrange to meet the emergency. Later, the time may come when the state will have a teacher who will give full time to the work.

THE BLIND AS DICTAPHONE OPERATORS

There are some processes in business life which the blind can perform with credit to themselves. As dictaphone operators they seem to have a special adaptability. If the young man or woman without sight who would undertake this work has a good knowledge of spelling and punctuation, and is able to put correct English on paper, here is a field which might be tried. The Board has had the opportunity to place competent blind persons as dictaphone operators. The knowledge of this has reached some of the younger of the adult blind in the state, and several have already undertaken to perfect themselves in the use of the dictaphone, bearing the expense of the training themselves. There is reason to believe that in several years the practicability of using blind people as dictaphone operators will have been established, and that a new field which offers good pay and desirable employment will welcome the competent blind to its ranks.

THE BLIND IN INDUSTRY

During the later days of the war there was started at the Crocker-Wheeler Co., in Ampere, N. J., the interesting experiment of employing blind people in industry along with those who have their sight. The effort was welcomed by persons who believe that normal blind people should take their place in industry wherever it is possible for them to do so. During the year the secretary of the Board was able to spend a day at the great electrical works at Ampere. The factory superintendent there has taken a serious interest in what is being tried, and has become convinced that the blind can perform many of the processes in industry including some work on power machinery. By the good work which the blind turn out he has been particularly impressed.

He is ready to concede they cannot work as fast as the person with sight, but he thinks they can do as good work. It is his belief, after months of trial, that he would prefer two blind workers in the shop to one sighted person. One of the most competent blind employees at Ampere is a totally blind girl who was educated by this state. She has been appointed stenographer and dictaphone operator.

The work at Ampere has served to confirm the belief that some workers for the blind have entertained, that certain intelligent blind persons would prove an asset in industry. The secretary of this Board has been able to interview manufacturers in various cities in this state, and to talk with them about the possibilities which blind workmen offer. These manufacturers have been told of the experiment at Ampere, and have been shown pictures of the blind at work there. If no direct results had been obtained, we might conclude that the effort had served educational ends, and that it might bear fruit sometime. Some of our people have been helped to positions, however, through this activity. It is with no little satisfaction that we contemplate the enviable record which one totally blind man was able to make in a munitions factory in the eastern part of the state. When he was finally given the opportunity to try to show what he could do, he was able to demonstrate in a short time that he could crimp more primers for big guns in a day than any other sighted worker who had ever used the machine in that factory. He did such good work that he was one of the last men in the shop to be laid off when the factory was about to be closed.

REGISTERING THE BLIND

The Board has at its office much useful information regarding the history and needs of the work for the blind in this state. It endeavors to keep as complete a register of the blind people in Connecticut as is possible for it to maintain. A census of the blind, which was taken here in 1912 by the Board, provided a nucleus for this. This register is being revised and brought up to date. There is on the statute books an old law requiring the selectmen to make a return each year regarding all the blind in their town. The law has not been enforced, but the

Board will try to secure the co-operation of the town officials in this matter, and to add to its knowledge of conditions in that way. The 1920 government census will take statistics for all the blind people in this state after the first of the year, and this information will be available for the use of the Board.

FEW BLINDED SOLDIERS

The fear was expressed at one time that this country would have numbers of blinded soldiers to care for. We are glad to say that there is not a large number of our men who lost their sight in the world war. Of the men from Connecticut there are probably only two who will be permanently blind. The Federal Board for Vocational Guidance has ample means at its disposal for the training of these men. The director of the work for the soldiers who have lost their sight is working in conjunction with this Board for the welfare of these men. While the state will probably not be called upon to provide for the training of any of its blinded soldiers, its facilities will be available if needed. In the meantime the Board has been useful in an advisory capacity.

CONVENTION AT TORONTO

The American Association of Workers for the Blind met at Toronto, Canada, in June. There were present at the convention from this state, A. L. Curado of the trades department, Mr. and Mrs. Gordon Hicks of the school department and the secretary of the Board. The meetings were intensely interesting. It was evident to some of those who were present that a new era in work for the blind is coming. We hope that Connecticut will have its full part in this.

The statement of the Board's expenditures during the year, as well as the financial statement of the Connecticut Institute for the Blind, are given on the pages of this report devoted to the financial statements.

The state auditors have examined and audited such items as fall within the range of their duties.

Respectfully submitted,

MARCUS H. HOLCOMB,
SAMUEL O. PRENTICE,
EDWARD M. DAY,
MARY M. BEACH.

ANNUAL REPORT

OF THE

BOARD OF EDUCATION OF THE BLIND

For the year ended June 30, 1920.

A viewpoint, new and hopeful, has come in work for the blind. It is as if the eyes of seeing people had been opened, and they had been permitted to survey the one who is without sight more nearly as he is. This, possibly, is what is most significant in our field the past year.

The man without sight is still the spectacle that he has been from Bible times. We start, and stare and allow our unthinking compassion full rein when we meet him upon the street. And yet, the inclination upon the part of the public to think of the blind man as a normal individual, save for his lack of vision, has been stimulated immeasurably of late. This new conception regarding the blind person is a hopeful sign, and those who have an intimate knowledge of people who are without sight realize that much has been gained.

It is not until we consider, somewhat carefully, that we realize how many fanciful conceptions that are really mistruths, have grown up about the blind. Because some few blind people have shown on the one hand unusual intelligence and ability, or on the other an uncouthness and lack of mental poise that marks them, we have been too ready to ascribe the physical and mental characteristics of these conspicuous examples of what the blind are not, to the considerable group of blind people who are normal and every-day sort of persons, with much the same likes and possibilities as any similar sized group of seeing people. How persistently these misconceptions have remained, to the detriment of the blind, is distressing. They have not only served to confirm the public in the belief that the blind can do with great readiness some things which they really cannot do, but it has encouraged the thought that the blind person cannot do some of the ordinary and very essential things which he can do. Thus we have found good people ready

to conclude that a normal blind person could perform some uncanny feat, but very loathe to believe that he could run a simple piece of machinery in industry, or do some other useful and necessary thing. This prejudice, if such we may term it, is what has hampered the blind even more than their physical handicap. It is this unfortunate condition which is being displaced.

With the public more ready to give the blind man a chance to show what he can do, there is the danger that those among the blind who are ill prepared by training or mental capacity to undertake a serious piece of work among seeing competitors will be allowed to blunder their way into industry and office work and in this way bring the work for the blind into disrepute. Many seeing people are not yet ready to use the discrimination that we wish they might, in judging all the qualifications that a blind person has for what he undertakes, and if one, who should never have been allowed to attempt a certain thing, fails, they are too quick to conclude that all blind persons are alike and that therefore no blind man could do what the other has failed at. We wish that we might make it clear to seeing people that all blind men and women are not alike, that they differ in this respect as much as the great world of people who have their sight. There are those among the blind who are undependable and who lack in character, just as there are such among those who have their sight; but there are among the blind also those who are strong and resourceful and who win our admiration by their splendid qualities of spirit and intellect. What we wish to contend for is that human nature is much the same—with goodness and badness intermingled in varying degrees, but never hopeless—and that this is true whether it is gifted with sight or not. If the public will come to judge the individual blind person more strictly upon his merits it will be better.

It will be seen that if permanent harm is not to result to the cause for the blind the State Board of Education of the Blind must move with energy and wisdom to see that the right sort of blind people secure work in factories and offices. It must work with such intensity and success that blind people throughout the state will be attracted by its efforts and will voluntarily seek its help when they desire employment. In this way the Board can serve the best interests of both employer and employe and can in some measure protect the cause from unfortunate placements which

might result disastrously. It can also endeavor to see to it that those who seek work have training for it, and can help to bring employer and employe together under the most desirable conditions.

GROWTH OF THE WORK

The Board has had 84 blind people, 21 of whom were adults, who have received educational advantages from the state the past year. This is a larger number than in any one previous year. The same was said in last year's report. At the School for the Blind the registration reached 51, and at the Department of Trades 17. At the Nursery at Farmington there were six who were old enough to be accepted as pupils by the state, although more than a dozen other children were cared for who were not chargeable to the state. Six pupils were entered at Perkins Institution at Watertown, Mass. One pupil was a student at Trinity college for part of the year, another was entered at the Huntsinger Business School in Hartford, while a third was given a course at the Danquard Player Action School in New York City. One pupil was taught in his home.

We believe that the work for the blind will call for a higher degree of specialization as state boards and commissions come to study individual cases more carefully. The day when all the blind people must be chair caners, mattress makers or broom makers is past. The field of endeavor which the blind person may enter is being enlarged. There is evidence of this, in our work in Connecticut, in the larger number of schools at which we have entered pupils. The past year two of our pupils were given special training at business schools in the use of the dictaphone. One was trained in Boston and the other at the Huntsinger Business School in Hartford. The former, a young woman, was helped to secure a position as dictaphone operator by this Board with the Phoenix Insurance Co. of Hartford. So far as we know she was the first dictaphone operator without sight to secure work in this state. The very day that this report was being written she called at our office to tell us that she had received her first raise in pay as the result of the merit and efficiency she had displayed. Incidentally she mentioned that she had been awarded a prize of \$5.00 in a contest which the Phoenix Insurance Co. had inaugurated, to see which of its women employees could make an acceptable dress in the most economical manner.

It was last fall that the members of this Board considered the case of a young man, 24 years of age, who had lost his sight only a few months previous. The case was pathetic and perplexing. We had tried to instruct him in piano tuning with but indifferent success. At the request of the secretary the Board voted to allow him to take a course at a business school. The Huntsinger School was selected. The young man applied himself with a show of industry and cheerfulness that led the principal of the school to point to him upon more than one occasion as an example. When he had finished the course our Board secured a position for him as dictaphone operator in the office of The Stanley Works in New Britain. He has already demonstrated his ability to do the work.

Another young man, who has no sight, who had been trained as a piano tuner, was sent to the Danquard Player Action School in New York City. He made a good record at the school and completed the course with honor. He is now doing private tuning at his home in Bridgeport.

WORK FOR THE ADULT BLIND

How, adequately, to give the adult blind the best that is available, in an attempt to help them to self support, has been one of the problems in Connecticut since the work was started, more than twenty-five years ago. No state has made satisfactory progress in this field. It has been only recently that what looks like the beginning of a real advance has come. Workers for the blind are beginning to feel that perhaps they have segregated the normal blind too much in the past; that the interests of the work might have been better served if they had not undertaken to give all the training a blind man is to receive, in an institution for the blind. Something might have been gained, they think, if an attempt had been made to place carefully selected cases out with seeing people, there to learn the trade they are to perfect themselves in or, at least, to receive some part of their training amidst such surroundings. This does not mean that a trade school, such as ours in Connecticut, has not served a good purpose. Even if one is to cut loose from traditions, and try the methods which common sense and a newer understanding of the work suggests, he will find an institution such as our Trades Department indispensable in planning for the well being of certain cases. An adult who has suddenly lost his sight

is greatly benefitted and stimulated by residence with other blind people. This contact with those who have learned how to be blind can hardly be obtained in any other way than by a stay at some institution for the blind. Moreover, when an adult voluntarily enters an institution, for training and contact with other blind people, it gives us a better opportunity to study the case and to decide what can best be done to help him to self support.

It may be that the time is approaching when our Trades Department can no longer be termed as such in any strict sense of the word. If some are coming to feel that normal blind people can do more things than they have in the past, we are also encouraged to conclude that schools and institution for the seeing will take them into the classroom and workshop, there to learn what is being acquired by those who have their sight. This solution of the matter would seem to be natural and satisfactory.

If we are not then to teach the trades at our institution at Wethersfield, the question arises as to what is to be done there. The Board does not feel that it is ready yet to make any recommendations. In the very large cities of the country there are workshops, where the blind make brooms and cane chairs for the most part. If their earnings are not sufficient to meet their living expenses they are given a subsidy by the state or city. It is hard to view workshops with especial liking, nor do we think that the need for one exists in Connecticut in the same degree that it does in Boston, New York, Philadelphia, Cleveland, Chicago and other great centers of population. There are things, however, to be said in favor of the workshop, and since the present superintendent of our Trades Department, A. L. Curado, is a strong advocate of it he would be quick to make it function as such if we should so decide.

The thought of a home for the blind is even less welcome. Public and semi-public institutions for infirm people, who are not wanted in the homes of their relatives, are oftentimes dreary places. In most cases the highest interests of all, including society, will be served best doubtless if the relatives and friends of the blind do not find it an easy matter to place them in a home for the blind.

MENTAL DEFICIENCY A PROBLEM

There is a considerable group among the blind who have handicaps which are more serious than their blindness. Most of

such are deficient mentally and many of them are feebleminded. Some workers for the blind are quick to say that those individuals should be provided for by the institutions which are open to mental defectives. There seems to be ground for this belief, but it has to be admitted that there is already a demand upon our Mansfield State Training School and Hospital which it has not the facilities to meet. The superintendent of this institution has assured us he would do what he could for several feeble minded persons who were blind, who needed to be admitted, but he said that he had no special methods at his command for educating the blind. Even if Mansfield could provide for any considerable number of the youth of our state who are feeble minded and blind there would still be the adults of this class. Eventually the state will probably decide to do something for such as these, and it may be then that accommodations at the Trades Department can be utilized.

During the year there were conducted at the School for the Blind a series of intelligence tests by Prof. S. P. Hayes of Mt. Holyoke College and his assistant. It is significant to note that of 47 children who were tested, 26 were assigned an intelligence quotient below normal. Of this group 10 were adjudged to be definitely feeble minded. In justice to several who did not test high enough to be assigned to the normal group it should be said that the nature of the tests were such that a fair estimate of their ability was not registered. With almost 20 per cent. of the children feebleminded a handicap is placed upon the teachers, and upon the other children, which is greater than we like to see it. It serves to emphasize, however, the seriousness of the problem.

THE BLIND IN INDUSTRY

In opening employment in the factories to the blind an advance has been made the past year. There is now hardly a manufacturing city in western Connecticut in which one or more factories is not employing some blind or partially blind person. The secretary has found large calls being made upon his time in an endeavor to secure this work for the blind in various parts of the state. It is a work, however, that has had its compensation. Not only have the blind operators been able to demonstrate their ability to do as good work as those with sight but the quantity, while not as great in many cases, has been satisfactory to the employer. Our

records show that there are now more than twenty-five factories in the state where the blind are employed. Some of them have two and even three blind employes and three factory officials have talked with the secretary about the feasibility of starting a department in their factory where only the blind would be employed. To explain all that this means to the blind, now and in the future, would be difficult. The words of one blind man who has such employment may help to visualize it. He remarked:

"I am the happiest man in Meriden. I was able today to pay a full week's board from my wages for the first time in twelve years."

WORK OF JEWISH WOMEN'S COUNCIL

In the fall of 1919 there was started in New Haven by Mrs. Irwin S. Levy, of the Jewish Women's Council of that city, a work for the blind which has been most helpful. Mrs. Levy sought the co-operation of this Board, with a view to making a survey of the blind in New Haven. A careful study has been made of a number of cases in that city. The study for the most part seems to bear out facts which had been collected previously by this Board—that there is not a large number of blind people in any community who are not wholly or partially self supporting or who are not, at least, engaged in doing something that is helpful and useful whether they are receiving money return for it or not. Among those who were visited were former state pupils. It was a satisfaction to learn that not one of them could be said to be in need.

Through the efforts of Mrs. Levy there has been started at the department store of the Shartenberg & Robinson Co. in New Haven a counter for the disposal of goods made by the blind. Articles are accepted from blind people all over Connecticut and when the article is sold the donor is paid practically the price which is received for it. This counter has proven a boon to some who have been able to contribute articles.

WOOD ALCOHOL CASES

Early in the calendar year liquor, which had been manufactured from wood alcohol, was sent into this state. Some deaths resulted and some were rendered blind. The Board communicated with every hospital in the state and located four persons

who had lost their sight as a result of this poison. One of these men is now at the Trades Department and the opportunities which the Board has to offer have been extended to the others. It is the usual thing to find persons who have lost their sight slow to adjust themselves to the new conditions. They frequently spend much money and time in trying different doctors in the hope of securing relief. It is not until they have satisfied themselves that their case is hopeless that they welcome the offices of this Board.

During the year the Board has tried to secure returns from each town in the state regarding the number of blind people within its borders. There is a statute, which had not been enforced for years, which requires that such returns be made. Of the 168 towns in the state, all but eleven have now made their return. We are able to estimate that there are about 1200 blind people in Connecticut. This bears out the ratio which has come to be accepted rather generally throughout the country, of one to every 1000 of the population.

How useful this Board can make itself to these people is limited only by the spirit and intelligence which it has at its command, and by the ability it has to cope with the difficulty of reaching such a considerable number of cases scattered as they are throughout the state. If the Board had more workers it could visit more cases and could do better work. The time is coming probably when Connecticut must develop the work of home teaching. We have been able to do some of this but there is need for more. We hope that it will not be long before we can have one or more home teachers devoting full time to the work.

The statement of the Board's expenditures during the year, as well as the financial statement of the Connecticut Institute for the Blind, are given on the pages of this report devoted to the financial statements.

The state auditors have examined and audited such items as fall within the range of their duties.

Respectfully submitted,

MARCUS H. HOLCOMB,
SAMUEL O. PRENTICE,
EDWARD M. DAY,
MARY M. BEACH.

"There is no law on the statute books compelling people to move up closer on the bench of life to make room for a blind brother; but there is a divine law written on the hearts of men constraining them to make a place for him, not only because he is unfortunate, but also because it is his right as a human being to share God's greatest gift, the privilege of man to go forth unto his work.

"The heaviest burden on the blind is not blindness, but idleness, and they can be relieved of this greater burden. The state can teach the blind to work, but their fellow citizens must furnish the market for their products."

HELEN KELLER.

Financial Pages

**(In accordance with Sec. 1080, Chap. 60, General
Statutes)**

BOARD OF EDUCATION OF THE BLIND

For the fiscal nine months ended June 30, 1919.

RECEIPTS

Amount appropriated by the General Assembly of 1917 for the two fiscal years ending June 30, 1919.....	\$53,700.00
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DISBURSEMENTS

Tuition and board of state pupils:

Perkins Institution for the Blind.....	\$ 2,342.21
Connecticut Institute for the Blind	18,741.92
Trinity College	398.81
Transportation and clothing	610.17
Office expenditures, including traveling expenses of Secretary	472.11

In addition to above Comptroller's report shows:

Salary of Secretary	\$1,350.00
Premium on Secretary's bond.....	12.50
State auditors	23.97
Machinery, materials and tools for state beneficiaries	394.54

\$1,781.01

Deduct:

Premium on Secretary's bond.....	\$12.50
State auditors	23.97

36.47

1,744.54

Amount disbursed for nine months ending June 30, 1919	24,309.76
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Amount disbursed for year ending September 30, 1918	22,775.00
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Balance of appropriation to credit of Board.....	6,615.24
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\$53,700.00

CONNECTICUT INSTITUTE FOR THE BLIND**in account with****SECURITY TRUST COMPANY, TREASURER****June 30, 1919.****ASSETS**

Land and buildings, School.....	\$94,097.95
Land and buildings, Nursery.....	13,000.00
Land and buildings, Trades.....	93,297.93

TRUST FUNDS

Endowment Fund.....	\$11,647.14
Endowment Fund, Trades.....	860.00
Cora C. T. Dwight Fund.....	10,000.00
Mrs. J. J. Goodwin Fund.....	5,000.00
Frances C. Palmer Fund.....	15,000.00
Frances C. Palmer Special Fund.....	7,000.00
Ruth Whitney Page Fund.....	1,000.00
Nursery Fund.....	200.00
Emma C. Goodrich Fund.....	5,000.00
	<u>55,707.14</u>

CASH

Endowment Fund.....	39.00
Cora C. T. Dwight Fund.....	125.00
Emma C. Goodrich Fund.....	75.00
Frances C. Palmer Fund.....	406.50
Frances C. Palmer Special Fund.....	97.50
Ruth Whitney Page Fund.....	9.50
	<u>752.50</u>
	<u>\$256,855.52</u>

LIABILITIES

Security Trust Company, Note.....	\$13,000.00
Net Inventory June 30, 1919.....	<u>\$243,855.52</u>

CONNECTICUT INSTITUTE FOR THE BLIND**in account with****SECURITY TRUST COMPANY, TREASURER**

Oct. 1, 1918 to June 30, 1919.

TRUST FUNDS

Oct. 1, 1918, Cash on hand:

Endowment Fund.....	\$44.00
Ruth Whitney Page Fund.....	36.95
Frances C. Palmer Special Fund.....	\$27.60
	\$608.55

RECEIPTS**ENDOWMENT FUND**

Coupons, City of Hartford.....	70.00
" American Tel. & Tel. Co.....	20.00
" N. Y., N. H. & H. R. R.....	60.00
" Baltimore & Ohio R. R. Co.....	67.50
Dividend, Travelers Insurance Co.....	96.00
" Aetna Insurance Co.....	4.00
Interest on loan, Salvation Army.....	60.00
	\$77.50

CORA C. T. DWIGHT FUND.

Interest on loan, Francis Conwell.....	250.00
" " " Schwartz & Nirenstein.....	133.34
	383.34

MRS. J. J. GOODWIN FUND

Coupons, Province of Ontario, Canada.....	6.11
Interest on loan, David Sisitzky.....	135.42
" " " A. J. Apter.....	63.79
	205.32

RUTH WHITNEY PAGE FUND

Coupons, Mutual Fuel Gas Co.....	50.00
	50.00

BOARD OF EDUCATION OF THE BLIND

TRADES DEPARTMENT ENDOWMENT FUND

Interest on Certificate of Deposit No. 58.....	23.65	
	<u> </u>	\$ 23.65

EMMA C. GOODRICH FUND

Interest on Certificate of Deposit No. 142.....	75.00	
	<u> </u>	75.00

FRANCES C. PALMER FUND

Interest on loan, City Bank & Trust Co.....	362.50	
" " " Salvation Army.....	462.51	
	<u> </u>	825.01

FRANCES C. PALMER SPECIAL FUND

Interest on loan, Richard H. Crase.....	150.00	
" " " W. J. Pierce.....	150.00	
" " " Ctf. of Deposit No. 97.....	57.50	
	<u> </u>	357.50
		<u> </u>
		\$2,905.87

DISBURSEMENTS

Transferred to General Fund for current expenses:

Endowment Fund.....	382.50	
Cora C. T. Dwight Fund.....	258.34	
Mrs. J. J. Goodwin Fund.....	205.32	
Trades Department Endowment Fund.....	23.65	
Frances C. Palmer Fund.....	357.55	
	<u> </u>	1,227.36

RUTH WHITNEY PAGE FUND

Payment to Lillian M. Russell.....	77.45	
	<u> </u>	77.45

FRANCIS C. PALMER TRUST

Balance due Security Trust Co.....	17.46	
Probate fees.....	2.25	
Services of Security Trust Co.....	41.25	
	<u> </u>	60.96

FRANCIS C. PALMER SPECIAL FUND

Probate Fees	\$ 2.25
Services of Security Trust Co.....	17.62
Income applied toward support of blind persons as directed under will of Frances C. Palmer.....	767.73
	\$ 787.60

Balance Income on Hand:

Endowment Fund.....	39.00
Cora C. T. Dwight Fund.....	125.00
Emma C. Goodrich Fund.....	75.00
Frances C. Palmer Fund.....	406.50
Frances C. Palmer Special Fund.....	97.50
Ruth Whitney Page Fund	9.50
	752.50
	\$2,905.87

CASH ACCOUNT WITH PRINCIPAL**RECEIPTS****ENDOWMENT FUND**

Legacy under will Annis Welton.....	\$200.00
Cash received in part payment of residuary interest in Estate of Henry P. Hitchcock.....	1,574.25

MRS. J. J. GOODWIN FUND

Payment of loan, D. Sisitzky.....	5,000.00
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NURSERY FUND

Legacy under will Sarah G. Hall.....	200.00
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EMMA C. GOODRICH FUND

Legacy under will Emma C. Goodrich.....	5,000.00
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FRANCES C. PALMER FUND

Payment of loan, City Bank & Trust Co.....	15,000.00
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\$26,974.25

DISBURSEMENTS**MRS. J. J. GOODWIN FUND**

Mortgage loan, E. T. O'Neil (formerly Apter) ..	\$4,000.00
Purchase \$1,000 Prov. Ontario 5%—1926 @ 97½.	975.00

4,975.00

FRANCES C. PALMER FUND

Mortgage loan, Salvation Army.....	15,000.00
	15,000.00

Balance Principal on Hand:

Endowment Fund.....	1,774.25
Mrs. J. J. Goodwin Fund.....	25.00
Nursery Fund.....	200.00
Emma C. Goodrich Fund.....	5,000.00
	6,999.25

\$26,974.25

INVENTORY**ENDOWMENT FUND**

Bonds, \$1,000 Amer. Tel. & Tel. Co. 4s, 1929.....	\$905.47	
" 3,000 N. Y., N. H. & H. R. R. 4s, 1947....	2,709.00	
" 3,000 Baltimore & Ohio R. R. 4½s, 1921..	2,906.48	
" 2,000 City of Hartford, Ct., 3½s, 1920....	1,900.00	
Mortgage Loans, Salvation Army 6% (share of \$50,000 loan).....	1,000.00	
Deposit, State Savings Bank.....	451.94	
Cash	1,774.25	
		11,647.14

CORA C. T. DWIGHT FUND

Mortgage Loans, Schwartz & Nirenstein.....	5,000.00	
" " Francis Conwell.....	5,000.00	
		10,000.00

MRS. J. J. GOODWIN FUND

Mortgage Loan, Eugene T. O'Neil.....	4,000.00	
Bonds, \$1,000 Province of Ontario, 5s, 1926.....	975.00	
Cash	25.00	
		5,000.00

RUTH WHITNEY PAGE FUND

\$1,000 Mutual Fuel Gas Co. 5%, 1947.....	1,000.00	
		1,000.00

TRADES DEPARTMENT ENDOWMENT FUND

Ctf. of Deposit No. 58, Security Trust Co. 6% (Secured by mortgage on Connecticut real estate)	860.00	
		860.00

FRANCES C. PALMER FUND

Mortgage Loan, Salvation Army.....	15,000.00	
		15,000.00

FRANCES C. PALMER SPECIAL FUND

Mortgage Loans, Richard H. Crase.....	3,000.00	
" " William J. Pierce.....	3,000.00	
Ctf. of Deposit No. 97, 6%, Security Trust Co. (secured by mtg. on Connecticut real estate)...	1,000.00	
		7,000.00

NURSERY FUND

Cash	200.00	
		200.00

EMMA C. GOODRICH FUND

Cash	5,000.00	
		5,000.00
		\$35,707.14

CONNECTICUT INSTITUTE FOR THE BLIND**in account with****SECURITY TRUST COMPANY, TREASURER**

From October 1, 1918 to June 30, 1919.

 Balance on hand, October 1, 1918..... \$544.03
RECEIPTS

Received from State Board of Education of the Blind	\$12,203.40
Board and tuition from other than State pupils..	1,163.94
Income from trust funds.....	2,203.09
Gross receipts, Department of Trades.....	9,846.47
Contributions	4,441.88
Miscellaneous income.....	185.43
Deficiency appropriation from State of Connecticut	8,363.55
Borrowed on note from Security Trust Co.....	13,000.00
	51,407.76
	\$51,951.79

DISBURSEMENTS**SCHOOL DEPARTMENT**

Salaries and wages.....	\$5,463.74
Provisions	2,175.80
Household supplies and furnishings.....	1,022.26
Educational expenses	117.11
Light, heat, water and insurance.....	811.82
Improvements and repairs.....	248.32
Farm expenses.....	477.05
Telephone and medical expenses.....	74.83
Miscellaneous expenses.....	357.21
	\$10,748.14

TRADES DEPARTMENT

Salaries and wages.....	8,004.55
Provisions	3,957.20
Household supplies and furnishings.....	1,188.10
Light, heat, water and insurance.....	2,439.66
Improvements and repairs.....	591.84

Farm expenses	\$ 441.61
Telephone and medical expenses.....	80.12
Miscellaneous expenses.....	861.69
Materials and supplies for shops.....	8,860.00
Automobile delivery.....	656.88
	\$27,081.65

NURSERY DEPARTMENT

Salaries and wages.....	1,760.30
Provisions	1,846.90
Household supplies, furnishings, etc.....	185.13
Improvements and repairs.....	33.46
Telephone and medical expenses.....	158.77
Light, heat, water and insurance.....	945.19
Miscellaneous expenses.....	57.26
	4,987.01
Interest on loan, Security Trust Co.....	345.59
Marcia D. Cone, Solicitor.....	590.80
Insurance and printing.....	396.40
William E. Osborne (securing contributions by mail)	25.00
Services of Security Trust Co.....	500.00
Payment of note held by Security Trust Co.....	7,000.00
	8,857.79
	\$51,674.59
Balance cash on hand, June 30th, 1919.....	277.20
	\$51,952.79

CONNECTICUT INSTITUTE FOR THE BLIND**in account with****SECURITY TRUST COMPANY, TREASURER****TRADES DEPARTMENT FURNISHING FUND****RECEIPTS**

Interest, State Savings Bank	\$ 3.33	
	<u> </u>	\$ 3.33

DISBURSEMENTS

Deposited, State Savings Bank.....	3.33	
	<u> </u>	3.33

INVENTORY

Deposit, State Savings Bank.....	170.00	
	<u> </u>	\$170.00

CONNECTICUT INSTITUTE FOR THE BLIND**in account with****SECURITY TRUST COMPANY, TREASURER****TRADES BUILDING FUND**

October 1, 1918, Balance cash on hand.....	\$2,290.34
	<u>\$2,290.34</u>

DISBURSEMENTS

Bill of S. R. Starkey.....	1,494.38
" " Thomas Stafford.....	330.29
" " Baldwin-Stewart Electric Company.....	60.16
" " Ford, Buck & Sheldon Inc.....	15.00
" " C. G. Bostwick.....	353.00
	<u>\$2,252.83</u>
Balance cash on hand.....	37.51
	<u>\$2,290.34</u>

BOARD OF EDUCATION OF THE BLIND

For the Year ended June 30, 1920.

RECEIPTS

Amount appropriated by the General Assembly of 1919 for the two fiscal years ending June 30, 1921.....	\$85,200.00
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DISBURSEMENTS

Tuition and board of state pupils:	
Perkins Institution for the Blind.....	\$ 1,800.00
Connecticut Institution for the Blind.....	28,337.77
Huntsinger's Business School	449.48
Trinity College	120.62
Danquard Player Action School	64.61
Home Teaching Expense	63.25
Tutoring	13.25
Transportation and Clothing	690.88
Office expenditures, including traveling expenses of Secretary	797.40
In addition to above Comptroller's report shows:	
Salary of Secretary.....	\$2,200.00
Salary of Stenographer.....	645.32
Premium on Secretary's bond.....	12.50
Machinery, materials and tools for state beneficiaries	1,142.30
	<u>\$4,000.12</u>
Deduct:	
Premium on Secretary's bond.....	12.50
	<u>3,987.62</u>
Amount disbursed year ending June 30, 1920.....	\$36,324.88
Balance of appropriation to credit of Board.....	48,875.12
	<u>\$85,200.00</u>

CONNECTICUT INSTITUTE FOR THE BLIND

in account with

SECURITY TRUST COMPANY, TREASURER

June 30, 1920

ASSETS

Land and buildings, School.....	\$94,097.95
Land and buildings, Nursery.....	13,000.00
Land and buildings, Trades.....	93,297.93

Trust Funds:

Endowment Fund.....	\$12,887.26	
Endowment Fund, Trades.....	860.00	
Cora C. T. Dwight Fund.....	10,000.00	
Mrs. J. J. Goodwin Fund.....	5,000.00	
Frances C. Palmer Fund.....	15,000.00	
Frances C. Palmer Special Fund.....	7,000.00	
Ruth Whitney Page Fund.....	1,000.00	
Nursery Fund.....	200.00	
Emma C. Goodrich Fund.....	5,000.00	
		<u>56,947.26</u>

Cash:

Ruth Whitney Page Fund.....	59.50	
Nursery Fund.....	12.00	
Department of Trades, Endowment Fund.....	25.80	
Frances C. Palmer Special Fund.....	197.59	
Emma C. Goodrich Fund.....	241.50	536.39
		<u>\$257,879.53</u>

LIABILITIES

Security Trust Company notes.....	13,000.00
Net Inventory June 30, 1920.....	<u>\$244,879.53</u>

CONNECTICUT INSTITUTE FOR THE BLIND

in account with

SECURITY TRUST COMPANY, TREASURER

July 1, 1919 to June 30, 1920.

TRUST FUNDS

July 1, Cash on hand:

Endowment Fund	\$39.00
Cora C. T. Dwight Fund.....	125.00
Emma C. Goodrich Fund.....	75.00
Frances C. Palmer Fund.....	406.50
Frances C. Palmer, Special Fund.....	97.50
Ruth Whitney Page Fund.....	9.50
	\$752.50

RECEIPTS**ENDOWMENT FUND**

Coupons, American Tel. & Tel. Co.....	40.00
" N. Y., N. H. & H. R. R. Co.....	120.00
" Baltimore & Ohio R. R.....	135.00
" Hartford, Connecticut.....	35.00
Dividends, Aetna Insurance Co.....	23.00
" Phoenix Insurance Co.....	48.00
" Travelers Insurance Co.....	240.00
" American Hardware Corp.....	60.00
Interest on loan, Salvation Army.....	60.00
" " " Rubbina Riccio.....	75.00
	836.00

CORA C. T. DWIGHT FUND

Interest on loan, T. R. Delaney.....	300.00
" " " Francis Conwell	34.72
" " " Francis R. Olmsted.....	115.84
	450.56

MRS. J. J. GOODWIN FUND

Coupons, Province of Ontario, Canada.....	50.00
Interest on loan, A. J. Apter.....	240.00
	290.00

RUTH WHITNEY PAGE FUND

Coupons, Mutual Fuel Gas Company.....	\$ 50.00
	<u> </u> \$ 50.00

TRADES DEPARTMENT ENDOWMENT FUND

Interest on Certificate of Deposit No. 58.....	77.40
	<u> </u> 77.40

NURSERY FUND

Coupons, U. S. of A. Second Loan.....	4.00
Interest on Participation Ctf. of Deposit No. 180....	8.00
	<u> </u> 12.00

EMMA C. GOODRICH FUND

Interest on loan, Estate of Lincoln S. Hickmott..	150.00
Interest on Participation Ctf. of Deposit No. 142..	16.50
	<u> </u> 166.50

FRANCES C. PALMER FUND

Coupons, Dominion of Canada.....	250.00
Interest on loan, Salvation Army.....	192.50
" " Henrietta K. Burr.....	210.00
" " M. Ramondo & A. L. Gervasio	90.00
Balance due Security Trust Company to next account	21.25
	<u> </u> 763.75

FRANCES C. PALMER SPECIAL FUND

Interest on loan, William J. Pierce.....	160.15
" " Richard H. Crase.....	165.00
" " Nettie Marks.....	17.17
Interest on Participation Ctf. of Deposit No. 97...	31.33
	<u> </u> 373.65
	<u> </u> \$3,772.36

DISBURSEMENTS

Transferred to General Fund for current expenses:

Endowment Fund.....	\$875.00
Cora C. T. Dwight Fund.....	575.56
Mrs. J. J. Goodwin Fund.....	290.00
Department of Trades Building Fund.....	51.60
Frances C. Palmer Fund.....	1,042.67
	\$2,834.83

Frances C. Palmer Trust:

Probate fees.....	2.25
Services of Security Trust Co., Trustee.....	37.13
Accrued interest and commission on \$5,000 Dominion of Canada bonds purchased.....	88.20
	127.58

FRANCES C. PALMER SPECIAL FUND

Probate fees.....	2.25
Services of Security Trust Co., Trustee.....	20.18
Accrued interest on \$4,000 N. Y. Central R. R. Co. bonds purchased.....	6.20
Income applied toward support of blind persons as directed under will of Frances C. Palmer...	244.93
	273.56

Balance Income on Hand:

Ruth Whitney Page Fund.....	59.50
Nursery Fund	12.00
Department of Trades Endowment Fund.....	25.80
Frances C. Palmer Special Fund.....	197.59
Emma C. Goodrich Fund.....	241.50
	536.39
	\$3,772.36

CASH ACCOUNT WITH PRINCIPAL

RECEIPTS

Balance Principal on hand July 1, 1919:

Endowment Fund.....	\$1,774.25
Mrs. J. J. Goodwin Fund.....	25.00
Nursery Fund.....	200.00
Emma C. Goodrich Fund.....	5,000.00
	\$6,999.25

RECEIPTS

ENDOWMENT FUND

Balance residuary interest in Estate of Mary L. Clarke	918.60
Legacy under will of James E. Craig.....	1,000.00
	1,918.60

CORA C. T. DWIGHT FUND.

Payment of loan, Francis Conwell.....	5,000.00
	5,000.00

FRANCES C. PALMER FUND

Payment of loan, Salvation Army.....	15,000.00
	15,000.00

FRANCES C. PALMER SPECIAL FUND

Certificate of Deposit No. 97 cancelled.....	1,000.00
Payment of loan, William J. Pierce.....	3,000.00
" " " Nettie Marks.....	1,000.00
	5,000.00
	\$33,917.85

DISBURSEMENTS

ENDOWMENT FUND

Mortgage loan, Rubbina Riccio.....	\$2,500.00
Subscription to 3 Shs. Travelers Insurance Company @ 100.....	300.00
Payment to Estate of Henry P. Hitchcock, Federal tax	400.00
	\$3,200.00

BOARD OF EDUCATION OF THE BLIND

CORA C. T. DWIGHT FUND.

Mortgage loan to Francis R. Olmstead.....	\$ 5,000.00	
	<u> </u>	\$ 5,000.00

NURSERY FUND

Participation Ctf. of Deposit No. 180 issued....	2,000.00	
	<u> </u>	2,000.00

EMMA C. GOODRICH FUND

Mortgage loan, Lincoln S. Hickmott.....	5,000.00	
	<u> </u>	5,000.00

FRANCES C. PALMER FUND

Purchase \$5,000 Dominion of Canada 5%—1926 @ 95%	4,787.50	
Mortgage loan, David & Max Mitnick.....	7,000.00	
“ “ Edward H. Molans.....	3,000.00	
	<u> </u>	14,787.50

FRANCES C. PALMER SPECIAL FUND

Mortgage loan to Nettie Marks.....	1,000.00	
Purchase \$4,000 N. Y. Central R. R. 7%—1933 @ 99%.....	3,995.00	
	<u> </u>	4,995.00

Balance Principal on Hand:

Endowment Fund.....	492.85	
Mrs. J. J. Goodwin Fund.....	25.00	
Frances C. Palmer Fund.....	212.50	
Frances C. Palmer Special Fund	5.00	
	<u> </u>	735.35
		<u> </u>
		\$33,917.85

INVENTORY

ENDOWMENT FUND

Bonds	\$1,000 American Tel. & Tel. Co., 4%—1929	\$905.47	
"	3,000 N. Y., N. H. & H. R. R., 4%—1947	2,709.00	
"	3,000 Baltimore & Ohio R. R., 4½%—1921	2,906.48	
"	2,000 City of Hartford, Conn., 3¼%—1926	1,900.00	
Stock	*1 Sh. Aetna Insurance Co.		
"	*2 Shs. Phoenix Insurance Co.		
"	*6 Shs. American Hardware Corporation		
"	*15 Shs. Travelers Insurance Company		
	Mortgage Loans, Salvation Army, 6%, (share of \$50,000 loan).....	1,000.00	
	" " Rubbina I. Riccio.....	2,500.00	
	Deposit, State Savings Bank.....	473.46	
	Cash	492.85	
			\$12,887.26

CORA C. T. DWIGHT FUND

Mortgage Loans	T. R. Delaney (formerly Schwartz & Nirenstein).....	5,000.00	
"	" Francis R. Olmsted.....	5,000.00	
			10,000.00

MRS. J. J. GOODWIN FUND

Mortgage Loan,	Eugene T. O'Neil.....	4,000.00	
Bonds,	\$1,000, Province of Ontario 5%—1926....	975.00	
Cash		25.00	
			5,000.00

RUTH WHITNEY PAGE FUND

Bond, \$1,000,	Mutual Fuel Gas Co., 5%—1947....	1,000.00	1,000.00
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TRADES DEPARTMENT ENDOWMENT FUND

Ctf. of Deposit No. 58, Security Trust Company, 6%, (secured by mortgage on Connecticut real estate)	860.00	
		860.00

BOARD OF EDUCATION OF THE BLIND

NURSERY FUND

Certificate of Deposit No. 180, Security Trust Company, 6%, (secured by mortgage on Connecticut real estate).....	\$ 200.00
	\$ 200.00

EMMA C. GOODRICH FUND

Mortgage Loan, Lincoln S. Hickmott.....	5,000.00
	5,000.00

FRANCES C. PALMER FUND

Mortgage Loans, David & Max Mitnick.....	7,000.00
" " Edward H. Molans.....	3,000.00
Bonds, \$5,000, Dominion of Canada 5%—1926....	4,787.50
Cash	212.50
	15,000.00

FRANCES C. PALMER SPECIAL FUND

Mortgage Loan, Richard H. Crase.....	3,000.00
Bonds, \$4,000, N. Y. Central R. R., 7%—1933....	3,995.00
Cash	5.00
	7,000.00
	\$56,947.26

* Stocks received from Estate Henry P. Hitchcock.

CONNECTICUT INSTITUTE FOR THE BLIND**in account with****SECURITY TRUST COMPANY, TREASURER****From July 1, 1919 to June 30, 1920**

Balance on hand July 1, 1919..... \$277.20
RECEIPTS

Received from State Board of Education of the Blind	\$24,468.03
Board and tuition from other than state pupils..	1,645.55
Income from trust funds.....	3,241.13
Gross receipts, Department of Trade.....	18,817.37
Contributions	6,599.29
Miscellaneous income.....	739.30
Deficiency appropriation from State of Connecticut	7,637.60
Ladies' Visiting Committee, Vacation Fund.....	310.00
	\$63,458.27
	\$63,735.47

SCHOOL DEPARTMENT

Salaries and wages.....	7,636.72
Provisions	2,301.65
Household supplies and furnishings.....	1,451.75
Educational expenses.....	352.68
Light, heat, water and insurance.....	2,121.91
Improvement and repairs.....	1,594.07
Farm expenses.....	957.88
Telephone and medical expenses.....	107.62
Miscellaneous expenses.....	646.89
	17,171.17

TRADES DEPARTMENT

Salaries and wages.....	13,775.36
Provisions	6,133.52
Household supplies and furnishings.....	1,887.71
Improvement and repairs.....	490.17

Farm expenses	\$ 509.79
Telephone and medical expenses.....	128.28
Miscellaneous expenses.....	998.73
Material and supplies for shops.....	10,499.47
Automobile delivery.....	774.20
Light, heat, water and insurance.....	2,559.83
	\$37,757.06

NURSERY DEPARTMENT

Salaries and wages.....	2,481.08
Provisions	2,012.63
Household supplies, furnishings, etc.....	270.52
Improvements and repairs.....	245.75
Telephone and medical expenses.....	94.71
Light, heat, water and insurance.....	774.27
Miscellaneous expenses.....	114.60
	5,993.56
Marcia D. Cone, Solicitor.....	836.67
Interest on loan, Security Trust Co.....	715.00
Insurance and printing.....	115.50
Services of Security Trust Company, Treas.....	500.00
Miscellaneous expenses.....	2.75
Payment account Vacation Fund.....	25.00
	2,194.92
	\$63,116.71
Balance on hand June 30th, 1920.....	618.76
	\$63,735.47

Appendix

RECOMMENDATIONS FOR LEGISLATIVE ACTION

(The following report was read at a special meeting of the State Board of Education of the Blind, December 23, 1920, and the recommendations herein contained were adopted).

There are about 1200 blind people in Connecticut. This includes those who have seriously impaired vision in both eyes, as well as those who have not even light perception, and are classed as "totally" blind. Generally, this Board considers as blind a person who cannot with the aid of glasses read ordinary ink print.

In the United States Census for 1920 the returns show 555 blind people in this state. This is undoubtedly too small an estimate. It has been the experience of workers for the blind in nearly every state that the Federal statistics of the blind have not approached the actual number of blind persons in the population except in certain years, like 1880, when the enumerators received additional compensation for the name of each blind person returned.

The subject of age at which the sight is lost is one of fundamental importance. The number of the blind in the years of childhood is comparatively small, while in later periods of life the number shows a large increase. Practically one-tenth of the blind population is under 20 years of age. Slightly more than one-fourth of those who have lost their sight are between the ages of 20 and 50 years, while more than three-fifths are past 50 years of age. Roughly speaking we might say there are of the 1200 persons in Connecticut who are blind, 120 who are under 20 years of age, 360 between 20 and 50 years of age, and 720 who are past 50 years of age.

The sex has significance. Up to 20 years of age blindness is about evenly distributed between the sexes. The period from 20 to 50 years of age, however, shows a preponderance of blindness among the men at a ratio of about seven to six, while for the group over 50 years of age the women form the larger group, the ratio being about six and one-half to six. In general terms this means that of the 120 persons in Connecticut, 20 years old or

under, who are blind, there are about sixty boys and as many girls, while of the 360 who are over 20 years of age and under 50, about 194 are men and 166 women; of the group over 50 years of age about 390 are women and 330 men.

A study of the nativity of those who are blind shows that in Connecticut about one-third of the total number—or about 400—are foreign born. The negroes among the blind in this state represent a negligible number—hardly more than 3 per cent.

Regarding the marital state of the blind, statistics vary slightly for the sexes. Generally speaking, however, two-thirds of the men and women of marriagable age are living in wedlock or have done so at one time. For Connecticut, we find of the 1080 persons over 20 years of age who are blind, only about 360 who are single.

STUDY OF SCHOOL CHILDREN

In a study of the blind the mentality of the members of the group is important data. It is needless to say that statistics concerning this are hard to gather. In Connecticut the only serious attempt which has been made to determine the intelligence quotient of a number of blind people has been with those who are under 20 years of age. Such a group is composed of school children and, obviously, the percentage of feeble-mindedness which would obtain in such, most of whom have been blind from very early life and from causes which are largely congenital, would not hold among those who did not become blind until after they had completed their teens. Of fifty blind children of varying ages in this state who were tested, twenty-eight were found to be below normal or average intelligence. Twenty-two, or less than 50 per cent., had normal intelligence or better. Three of these twenty-two were listed as possessing superior intelligence and three very superior intelligence. It is interesting to note that of the twenty-eight who were found to be below normal, ten, or 20 per cent. of the whole number, were definitely feeble-minded, while five, or 10 per cent., were border line cases, sometimes classified as feeble-minded, and the others were classified as dull but probably not feeble-minded. While we should not wish these statistics to be used as the basis of deductions as to the prevalence of feeble-mindedness among the blind, we believe, nevertheless, that they

are significant. This considerable group of more than 50 per cent., if the tests are correct, who are dull and some feeble-minded, but who are educable and are capable of taking their place in society without arousing undue attention, as they become older must be reckoned among the adult blind, where they call for special study and provision. Furthermore, any serious attempt to study the mentality of children who are blind reveals the fact that there is a considerable number of blind children whose mentality is so low that they could not gain admission to a school for the blind and, hence, would have no representation among the above group which has been under study. What percentage of the total number of blind children such a class would represent we cannot say. They would certainly not be negligible and the admission of their presence is further evidence that any carefully directed work for the blind must take cognizance of these conditions.

STATISTICS FOR CONNECTICUT

The foregoing statistics, except those regarding the mentality, which do not cover a sufficiently representative group to warrant such treatment, follow in tabular form:

	Figures of State Board	Federal Census for 1920	
Number	1200	555	
	Under 20 years	Between 20 and 50	Over 50 years
Ages	120	360	720
	Under 20 years	Between 20 and 50	Over 50 years
Sex	60 (boys) 60 (girls)	194 (Men) 166 (women)	330 (men) 390 (women)
	Under 20 years	Between 20 and 50	Over 50 years
Nativity	Native-born 760	Foreign-born 400	Negroes 40
	Married	Single	
Marital State*....	720	360	

* Applies to those 20 years of age or over.

RELIEF FUND FOR THE BLIND

We do not think that a large percentage of the blind people in Connecticut are in actual need because of the loss of sight. The need, if it exists, is because of some other defect or circumstance. Popular fancy, however, is ready to attribute the inability of a person who is without sight to earn his way to his lack of vision, and the unthinking blind person is honest in his belief that he would be able to well if he could see. A person of normal intelligence and wholesome viewpoint who has lost his sight not later than middle manhood, and has found available suitable and stimulating opportunities for training and readjustment, would probably be able to achieve self support. There are many who are blind, however, who are past their most productive years, and a considerable number of others who, because of lack of mentality, stability or character, are not able to take their place in the community with any certainty of continued independence. It seems, therefore, that the State of Connecticut should meet such conditions with carefully regulated relief measures. It is recommended, therefore, that the State Board of Education of the Blind present at the session of the General Assembly, to be convened in 1921, such prospective legislation as shall permit the granting from the state funds, by this Board, to blind people who are in actual need, and who are legal residents of the state, of certain weekly or monthly grants in varying sums up to and including a maximum amount which shall be fixed by statute.

There are eleven states which now grant some form of pension, so called, to blind people. In addition, New York City gives annual grants to the citizens who are without sight. The State of New York has, as yet, no pension system for the blind, but the Commission for the Blind in that commonwealth is studying the workings of the system in other states with a view to making recommendations which shall seem wise.

Ohio was the first state to grant pensions to the blind. That was in 1898. The plan has had its evils wherever it has been tried, but there has been also a beneficent side. Gradually each state has found its grants for this purpose mounting to larger and larger annual totals until now one state is expending more than \$400,000 a year for pensions, in which more than four-fifths of the blind people in the state are participating. Surely this is too

large a sum and the number of persons without sight who know the bounty of the state has assumed dangerous proportions. Frankly, however, as far as can be ascertained, there has apparently been a similar trend in other states which have undertaken to disburse pensions. Too many persons who are not in actual need, and who would be better off if the necessity for putting forth their best efforts toward self support were not removed by the knowledge that a pension fund is available, have been added to the pension list.

Doubtless some of the undesirable features have arisen from the fact that the pension, in nearly every state, is a specified amount, paid at stated intervals and in equal amounts to all who qualify. Apparently no attempt has been made to grade the cases as to their varying degrees of need, nor have those who have had in charge the disbursing of the pensions made the wisest attempts to direct the beneficiaries into ways and methods of self support, nor taken steps when this end has been in sight of cutting off further enjoyment of the state's funds.

The State of Massachusetts has what appears to be the most workable plan. The Commission for the Blind is authorized to disburse grants to those blind persons who are in actual need. The relief is granted according to a sliding scale—although a maximum is fixed—and those who are most in need are given the largest grants.

When Massachusetts started its system of relief it was aiding scarcely more than 8 per cent. of the 3500 blind people in the state. Although this was only three years ago, the number of those aided has grown to nearly 20 per cent., and the last annual period for which figures are available the commonwealth expended \$65,000 for this sort of relief.

We should hope that the system would not assume such proportions in Connecticut. We believe that 12 per cent. is a fair estimate of the number of blind persons in this state who are in actual need. We recognize, however, that in no state where pensions have been introduced has the number of beneficiaries been as small as this. It has varied anywhere from one-fifth to four-fifths of the total number.

If 12 per cent. of the 1080 blind adults in Connecticut were to receive a maximum expenditure of \$5 a week, the total would

amount to \$34,000 at the end of a year. This Board would be inclined to feel that such an amount would be in excess of the actual needs, although it would not be out of proportion to the course taken in other states. Probably \$15,000, and at the most, \$20,000, would meet the annual requirements for the relief of the needy blind in Connecticut.

HOME TEACHING REQUIREMENTS

The Board recommends a change in the statutes so that the state may enjoy the benefits of home teaching for the blind, and suggests the appointment of two blind or partially blind persons to do this work. The home teacher goes to the blind person in his home. In the intimate, sympathetic approach of such a person there is peculiar benefit. The hands of the blind may be taught various tasks, which may prove not only an enjoyable pastime, but useful toil as well. In some cases these manual efforts may be turned to material account. Certain marketable articles may be fabricated, to be placed on sale by some suitable agency, the proceeds therefrom to go to the blind person. This constitutes helpful aid. Home teaching, though possible for all classes of the blind, is particularly adapted for those who have passed middle life, especially the women, who are naturally much confined to their homes. Home teaching is passing from the place where it affords intellectual instruction alone, and is taking on also an enlarged scope and may, perhaps, more properly be regarded as field work for the blind. As it is now being expanded it is practically without limits.

This form of service was started in 1882 by the Pennsylvania Home Teaching Society. Massachusetts was the first state to take it up under its state commission. This was in 1900. Rhode Island followed in 1904 and a number of other commonwealths have adopted the method. Three New England states, Massachusetts, Maine and Rhode Island, now use home teachers.

It is an expensive work from the fact that generally the teacher requires a guide, who has to be paid a nominal wage, while the state has also to meet the traveling expenses of both. In Massachusetts the home teachers are paid \$900 a year and their transportation while, if they are away from home, they are allowed their meals and room rent. The guide is paid at the rate of \$1.75

a day in Massachusetts. In New York State the home teachers receive \$1020 a year, with somewhat similar arrangements for transportation and board as prevail in Massachusetts. In New York State the guides are paid \$1.50 a day. The annual cost for one teacher in these states is as follows:

	Teacher's Salary	Guide's Salary	Teacher's Expenses	Guide's Expenses	Total
Massachusetts	\$900	\$546	\$600	\$500	\$2546
New York	\$1020	\$470	\$492	\$450	\$2432

We believe that Connecticut should expend \$5,000 a year in this work. This would provide for two home teachers. Such an arrangement would meet merely the minimum of requirements.

APPROPRIATIONS NEEDED

If the Board of Education of the Blind is to carry out the program which has been outlined herewith, it will be necessary to ask the State Board of Finance to permit it to revise its estimate of expenses for the bi-ennial period 1921-1923. The appropriation which was granted for the bi-ennial period 1919-1921, and the appropriation which is suggested for 1921-1923, are as follows:

	Appropriation Granted 1919-1921	Appropriation Suggested 1921-1923
Tuition and board of state pupils.....	\$76,500	\$76,500
Transportation and clothing of state pupils....	1,500	2,000
Machinery, materials and tools for state pupils.	2,000	2,600
Expenses of board and salaries.....	5,200	10,600
Home teachers and expenses.....	Nothing	10,000
Relief for needy blind.....	Nothing	20,000
Totals	\$85,200	\$121,700

PROPHYLACTIC MEASURES

There is a statute which requires in this state, under penalty of fine, the reporting of cases of infants' sore eyes, from which result a considerable percentage of the cases of total blindness and

seriously impaired eyesight in infants. We believe that this statute should be so amended that it shall be obligatory for every physician or midwife to instill or have instilled immediately upon its birth in the eyes of the newly-born child, one or two drops of a suitable solution of silver nitrate, furnished by the state health authorities. It would not be necessary for this Board, however, to ask for an appropriation for the free distribution of the silver nitrate outfits, since such action should come from another commission.

FUNCTIONS OF A STATE ORGANIZATION FOR THE BLIND

We are asked frequently for a statement regarding the functions of this Board. It was created by legislative action, in 1893, to provide for the education of blind people, both children and adults. To this end, it contracts for the education of blind or nearly blind persons who are found to be educable, with institutions which have suitable facilities for the instruction of the blind. For the adults it arranges for a continuance of academic work if they show promise, or, if the case requires it, for a stay at a trade school where some useful, practical training can be acquired. Upon the completion of this training, if conditions warrant, such persons are aided by the Board to start in business at their home or elsewhere. The Board is instructed by statute to visit in their homes the blind people who have received such training and to guide them wisely in fashioning their future. It is directed, furthermore, to inform itself regarding the needs of the blind of this state that it may present its findings to the General Assembly.

Work for the blind is being intelligently furthered along broadening lines by commissions for the blind in most of the states. It is hoped that with the enactment of bills which have been presented to the Legislature that the scope of the work may be widened in Connecticut. If creditable work is to be done, a state department for the blind should function somewhat in this manner:

Registration of the Blind: Data concerning social, medical and industrial conditions of all blind or partially blind persons.

Bureau of Information and Advice: Inquiry into the condition of blind persons in institutions, and the maintenance of a service bureau to which blind people may apply for any reasonable advice or assistance; co-operation with other agencies.

Home Teaching: Instruction in reading, writing and home industries by home teachers for the blind.

Training and Employment: Educational advantages for each blind person, including instruction in a trade or handicraft; placement in industry or office work; establishment in small business; newsstands; loan of equipment; workshops; provision for industrially sub-normal.

Standardisation of Industrial Work: Distribution of materials and sale of products.

Prevention of Blindness: Educational publicity; medical follow up work; conservation of vision classes; securing of specialists' services and hospital treatment.

Legislation: Extension of educational opportunities; measures for prevention; provisions for relief; special privileges for the blind.

INSTITUTIONS IN CONNECTICUT

There are three institutions for the blind in this state, a nursery at Farmington, a school at Hartford, and a trades department at Wethersfield. The last named is for adults. Each of these is a separate department of the Connecticut Institute for the Blind, which is a private corporation without stock. The board of directors of the Connecticut Institute is responsible for the conduct and upkeep of these departments. The state gave most of the money for the buildings at the trades department and school, and has a lien against them, and the Board of Education of the Blind is charged with visiting, inspecting and reporting concerning each of the departments, but, strictly speaking, they are privately owned and conducted. The Board of Education of the Blind arranges for the education and board of blind people from this state at the above departments or elsewhere, if it is deemed best.

Any who desire further information regarding the work for the blind in Connecticut should address their communications to the Secretary of this Board at Room 74, State Capitol, Hartford.





CONNECTICUT STATE LIBRARY, HARTFORD.

GEORGE S. GODARD, *Librarian*.

East end of Connecticut State Library and Supreme Court Building showing part of windows to Main Stack, Studies, Law and Legislative Reference Stack, Newspaper and Records Room, and Main Reading Room; Constitution Oak and Capitol at the right.

State of Connecticut
PUBLIC DOCUMENT No. 13

REPORT
OF THE
STATE LIBRARIAN

TO

The Governor

For the Twenty-one Months Ended September 30, 1920



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HARTFORD, CONN.

CONNECTICUT STATE LIBRARY

Hartford, November 28, 1920.

To His Excellency

MARCUS H. HOLCOMB,
Governor.

Sir: I have the honor to submit herewith my report as State Librarian of Connecticut for the fiscal years ended June 30, 1920. In the preparation of this report I have aimed to make it a book of practical use as well as a report upon the life and progress of the Connecticut State Library for the period covered.

As it is twenty years ago to-day since I, after serving two years as Assistant Librarian, was appointed State Librarian of Connecticut "to succeed the late Charles J. Hoadly, L.L.D., who after a service of forty-five years died, Oct. 19, 1900" I am led to make this report a sort of review of our work during these twenty-two years.

Thanking all those who have assisted in the development and housing of our State Library and looking forward to a continuance of the same, I have the honor to remain

Very respectfully yours,

Geo. S. Godard.

State Librarian.

STATE LIBRARY COMMITTEE

His Excellency, MARCUS H. HOLCOMB

Hon. FREDERICK L. PERRY.

*Hon. WILLIAM HAMERSLEY

Hon. SAMUEL O. PRENTICE

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State Librarian

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†Resigned

THE CONNECTICUT STATE LIBRARY

The Connecticut State Library, like practically all the State Libraries of the older states, had its foundation in the miscellaneous collection of books which had gradually accumulated in the offices of the several state officials from the beginning. These volumes consisted principally of books purchased to meet temporary official necessities, or which had been presented by sister states, foreign governments, or individuals. Until they had been gathered together, arranged and some one made responsible for their completeness and safety, they were of very little service to the public.

In May, 1854, the General Assembly provided for the appointment of a State Librarian and the miscellaneous collection of books belonging to the state which had been accumulating in the office of the Secretary of State were placed in the custody of this new official. During the sixty-seven years which have elapsed since 1854, Connecticut has had but three State Librarians; viz.: Dr. J. Hammond Trumbull, who served one year when he resigned; Dr. Charles J. Hoadly, who served from September, 1855, until his death, October, 1900, a period of forty-five years, and the present State Librarian, who came to the State Library in August, 1898, as assistant and was appointed State Librarian November 28, 1900.

From its rooms in the old State House, now the old City Hall, the Library was moved to larger and more convenient quarters in the new Capitol in 1878, where it remained until the completion of its new home in our State Library and Supreme Court Building, to which it transferred its activities November 28, 1910.

The Connecticut State Library is especially fortunate, being central in its location, housed in a building substantially built, beautiful in its architecture, convenient in its arrangement, harmonious in its decorations and homelike. It is, to paraphrase the words of another, a library by the people, of the people, and for the people.

From time to time as required, new departments have been added and the scope of its activities have been increased. With the other libraries in Hartford it forms a University System.

To the judge and attorney the State Library is the Law Library of the State, commendably complete in its several lines.

To the legislator and man of public affairs it is a Legislative Reference Library, in which he can, at his own convenience and in his own way, study easily, intelligently and fully, not only the

trend of legislation both at home and abroad and learn something of the reasons for and against the several movements, but he can also ascertain there the contents and daily status of each bill in his own legislature.

To the town clerk and judge of probate it is a possible, convenient, desirable and safe depository for records, files and papers not in current use, and a source of intelligent assistance, which is theirs for the asking, in matters pertaining to binding, repairing, indexing and caring for those records which must be retained in their several offices.

To the state officer and commissioner, the State Library is the place where he can find at any time the reports of his own department and similar departments in other states, and a place where he can deposit any special reports, records or other material which may come to him, or which he may care to have in a place of safety, and at all reasonable times have accessible to him and to those who have a right to use them.

To the selectman and town treasurer the State Library is the place where they are confident they can find a commendably complete file of the financial reports of their own towns and neighboring towns, which are so often lacking at home.

To the World War Veterans the State Library is the Department of War Records established by the Connecticut General Assembly in 1919, to collect, classify, index and install available material relating to Connecticut's participation, public or private, in the World War. Here the records of the activities and services of individuals, in their own words, and or organizations, cities, towns, counties and the state, officially — overseas and at home — all on uniform blanks, are being assembled for the benefit of our children and their children.

To the Civilian War Workers the State Library is the depository of the records and files of the Connecticut Draft Executive, the State Council of Defense, the State Agricultural, Industrial and Military Censuses, and the reports and returns of war activities from the several cities and towns, and, the many organizations interested in war work throughout the state.

To the Military Order of Foreign Wars, the State Library is the permanent home of the Foreign Wars Historical Collection assembled by its members and friends.

To the civil engineer and surveyor the State Library is not

only a source of supply of topographical maps of the State as it is today, but the depository of the official copy of the drawings and specifications for all dams and waterways approved by the State Board of Civil Engineers, and the repository of records showing the layout of many counties, towns, school districts, ecclesiastical societies, highways, etc., as they now are or used to be.

To the members of the Connecticut Geological and Natural History Survey and those interested along these lines, the State Library is the distributing and exchange agency for the several publications of the Commission.

To the minister of our older churches the State Library is a mine of wealth concerning many things which relate to the life and activities of the church in the days of our fathers.

To the genealogist and descendants of Colonial and Revolutionary ancestry our large collection of muster-rolls, pay-rolls, lists, receipts and miscellaneous manuscripts, made available by minute indexes, the Barbour Collection of Connecticut Vital Records, each town arranged alphabetically, supplemented by our collection of genealogies and local histories, is the one department thought of.

To the members of the Connecticut Society of Colonial Dames the Connecticut State Library is the home of that unique collection of manuscript histories relating to the early homes of our fathers in Connecticut, which are being compiled by this society.

The student of political economy and government is attracted by our large collection of public documents of our own state, the sister states, the United States, and the Dominion of Canada and its several provinces, arranged in long series, easily accessible.

The inventor and prospective patentee thinks only of our long sets of patent reports and certified copies of specifications and drawings of patents, always at his service.

The pupils of our public schools think of the State Library as the home of the old Charter, the Stuart portrait of Washington, the portraits of our several governors, and the place where they can see so many things of interest to them connected with the history of our own State and the general government.

The numismatist has formed his idea of our State Library through that remarkable collection of coins, currency, medals.

tokens and associated books, recently presented to the State by one of her sons, the late Joseph C. Mitchelson of Tariffville, Connecticut, and Kansas City, Missouri.

To the tourist and professional traveler the Connecticut State Library is simply a beautiful, new building, which having been planned from the inside out as well as from the outside in, and having been built upon honor and for time, is acknowledged to be a model of its kind.

To the several state libraries of our own country and governmental libraries of Europe the Connecticut State Library is looked upon as the exchange medium with the State of Connecticut, through which they receive promptly the official publications of the State, and in which may be found the several official publications sent in return.

To the sons and daughters of Connecticut, who have inherited or accumulated manuscripts and records which they have held almost sacred, the Connecticut State Library is regarded as a most fitting depository for these private collections of official and semi-official papers, which have to do with the early life and activities of the State and its several families.

To the librarian and his staff the Connecticut State Library is a group of departments, housed in a model building, with interested and competent assistants, whose aim and purpose is to serve intelligently, promptly, and courteously not only the inquirers of our own generation but, so far as possible, also, those who are to follow.

The above, I imagine, are some of the ideas which have become clustered about the name of the "Connecticut State Library," and may we not say that all of them are right, simply looking at the Library from their own point of view, and thinking along the lines in which they are especially interested.

LIBRARY EXPENSES

When the Library was located in the Capitol, the expenses recorded as State Library expenses were limited practically to the librarian and assistants, and purchase of books. There were no charges for heat, light, janitor service, watchman, care and repair of building or grounds; all these expenses came as part of the Capitol expenses. But when in the Capitol, the books of the library were stored on five different floors upon crowded and

overloaded shelves or in heaps upon the floor. Many important sets of books were separated or incomplete or entirely inaccessible. It required no little thought and labor to keep the current and more important works fairly accessible. Moreover, the great danger from fire, water, and other possible damages to which our invaluable collections and books were exposed was great, and the accommodations for readers and investigators were very meager.

In its new home, in our new and model State Library and Supreme Court Building, proper provision has been made whereby all the books of the library have been brought together, where the several portraits of our governors have been properly and safely hung, where accessible vaults properly equipped have been provided for invaluable records and papers, where proper facilities for readers and investigators have been provided, and where suitable provisions have been made for the necessary development and work of the several departments of our State Library.

It should also be borne in mind that our Supreme Court and its main offices are also housed in this same building, and cared for by the same janitor service.

EXPENDITURES

Expenditures of the State Library for the twenty-one months ended June 30, 1920, have been as follows:

	9 mos.		
	1918-1919	1919-1920	Total
Purchase of Books	\$5,425.22	\$3,834.65	\$9,259.87
Special Reports	1,592.62	1,673.78	3,266.40
New Books	164.34	470.44	634.78
Legislative Reference	3,357.16	5,278.11	8,635.27
Records	3,570.20	4,457.28	8,027.48
Binding	3,338.32	872.63	4,210.95
Incidentals	1,295.38	1,157.78	2,453.16
Supplies	2,260.28	2,298.37	4,558.65
Mitchelson Collection	419.15	167.22	586.37
Revolutionary War Records	535.30	499.66	1,034.96
Assistants	7,090.70	10,846.26	17,936.96
Examiner Public Records			
Salary	416.67	1,500.00	1,916.67
Inc. Expenses	957.76	1,229.19	2,186.86
	<u>\$30,423.10</u>	<u>\$34,285.28</u>	<u>\$64,708.28</u>

Marking Soldiers' Graves

ASSISTANCE

The large increase in the number of frequenters and users of the library, the ever-increasing number of official and other publications and records received, and the large amount of work to be done upon the material long since in the library and never catalogued, continues to make our State Library a busy place. The labor of getting from and returning to the shelves books called for is but a small part of our work. The real labor comes in the selection, securing, preparing, cataloguing and maintaining these volumes.

So rapidly has the library advanced along its lines of activity, and so many are the demands made upon it, that it has been necessary from time to time to increase the force of assistants and further specialize their work. As gumption, adaptability, preparation and enthusiasm are essential to the success of any library staff, it is a pleasure for me at this time to express my appreciation of the work which has been accomplished through the interested co-operation of the several members of my staff, each one of whom it has been my privilege to select, having in mind the special lines of work to be accomplished.

The following colleges and library schools are represented upon the staff: Yale, Wesleyan, Cornell, Smith, Mount Holyoke, Simmons, Drexel, Albany and Vassar.

SALARIES OF STATE LIBRARIAN AND ASSISTANTS

	9 mos.	
	1918-1919	1919-1920
George S. Godard, State Librarian	\$2,700.00	\$5,000.00
Fanny I. Yale, Librarian's Assistant	770.00	
Louise M. Bailey, Cataloguer	964.98	1,609.98
Adella M. Green, Cataloguer	654.00	1,035.00
Janet D. Lambdin, Cataloguer	338.33	
Mildred D. Rogers, Cataloguer	75.00	845.00
Winifred S. Merrill, Cataloguer	41.67	1,021.66
Christian N. Due, Reading Room	1,101.00	1,725.00
Kathryn C. Belden, Memorial Hall	702.00	1,260.00
Florence H. Herman, Receiving Room	578.50	959.97
M. V. B. Barker, Assistant	621.00	1,035.00
Josephine McK. Stults, Cataloguer	500.50	
Marion C. Herter, Librarian's Assistant		966.00
Mark Holmes, Photostat Operator		316.65
Helen Coffin, Legislative Reference	1,203.00	1,845.00

Renee M. Ramsden, Legislative Reference	600.00	885.00
Ruth B. McLean, Legislative Reference	804.99	1,336.00
Effie M. Prickett, Archives and Records	1,101.00	1,725.00
Elizabeth A. Osborn, Archives and Records	366.00	
Mary E. Smith, Archives and Records	621.00	1,035.00
Martha G. Barnard, Archives and Records	390.00	252.74
Minnie DeNezzo, Archives and Records	198.00	
Edith E. Colvin, Archives and Records	142.25	840.00
Aldina A. L. Galarneau, Archives and Records ...		307.71
Florence A. Favor, Telephone Switchboard	65.00	
Charlotte R. Little, Telephone Switchboard	405.00	
Mabel L. Patterson, Telephone Switchboard	152.50	870.00
Lucius B. Barbour, Exam. Public Records,		
Salary	416.67	1,500.00
Inc. Expenses	957.76	1,229.10
	\$16,470.15	\$27,599.81

BUILDING

Maintenance of the State Library and Supreme Court Building for eighteen months ended June 30, 1920, has been as follows:

	9 mos.		
	1918-1919	1919-1920	Total
Weekly Payroll	\$14,010.44	\$16,996.99	\$31,007.43
Monthly Payroll		1,436.00	1,436.00
Bindery Payroll		250.00	250.00
Switchboard	622.50	870.00	1,492.50
*Maintenance Building	22,858.82	16,329.49	39,188.31
	\$37,491.76	\$35,882.48	\$73,374.24
*Building	\$963.21	\$1,665.28	\$2,628.49
Coal	4,871.13	7,033.30	11,904.43
Light	478.77	589.79	1,068.56
Power	190.67	146.25	336.92
Equipment	11,938.90	2,655.17	14,594.07
Protection	273.00	395.65	668.65
Telephone	456.94	685.25	1,142.19
Janitor's Supplies	876.94	1,085.69	1,962.63
Engineer's Supplies	7.38	9.86	17.24
Boiler House	1,169.96	304.60	1,474.56
Grounds	245.91	171.58	417.49
Miscellaneous	1,386.01	1,461.75	2,847.76
Insurance		125.32	125.32
	\$22,858.82	\$16,329.49	\$39,188.31

SALARIES OF BUILDING EMPLOYEES

	9 mos.	
	1918-1919	1919-1920
Charles J. Fancher, Supervisor	\$1,400.00	\$833.50
Walter J. Wheaton, Guide	880.00	1,161.00
Walter S. Colton, Day Policeman	920.00	1,212.00
James E. Officer, Night Watchman	920.00	1,212.00
Horace J. Sanders, Night Watchman	920.00	276.00
Arthur E. Officer, Night Watchman (subs.)	55.84	27.44
David Christie, Night Watchman		946.00
Frank W. Little, Engineer and Supervisor	1,200.00	2,146.00
Fred F. Quebec, Fireman	1,000.00	1,392.00
John Pfab, Fireman	450.43	
John Gilliland, Fireman (substitute)		6.86
Frank S. Lilley, Fireman (substitute)		87.72
Douglas Dean, Fireman		536.00
Carmine Di Persio, General Helper	840.00	1,149.00
Edward John Stentafor, General Helper	840.00	1,149.00
Mrs. Wm. J. Quinn, Cleaner	600.00	727.97
Mrs. Jennie McTernan, Cleaner	560.00	756.00
Mrs. M. Christie, Cleaner	560.00	753.00
Mrs. M. A. Hines, Cleaner (substitute)		43.00
Mrs. Ida Porter, Cleaner (substitute)		47.50
Charles E. Buttles, Carpenter and Painter	960.00	1,380.00
Bryon Gracy, Carpenter (substitute)	17.50	
William Edwards, Grounds	929.17	1,408.00
A. L. Klunker, Binder		250.00
Robert E. Bailey, Photostat Operator	105.00	
Earl Coon, Photostat Operator	246.00	
Henry Henrickson, Photostat Operator	82.50	
Henry E. C. Watson, Mail Carrier and Messenger ..	444.00	813.00
Louis Gorham, Mail Carrier and Messenger	80.00	370.00
	\$14,010.44	\$18,682.99

PROBLEM OF CONNECTICUT RECORDS

The problem of public records and quasi-public records and archives in Connecticut is perhaps somewhat unique, as I am inclined to think some of our methods and work must of necessity be somewhat unique.

I do not need to remind this company that Connecticut, often called the "Constitution State," the "Land of Steady Habits," or the "Wooden Nutmeg State," is not only a New England State and one of the thirteen original colonies, but that some of its settlements had been in existence over one hundred and fifty

years at the time of the Federal Constitution. Like the United States, Connecticut grew, developed and flourished.

Our records began in 1636, and were continued with the records of the Connecticut Colony on the Connecticut River organized from the three river towns — Windsor, Hartford and Wethersfield — each at first individual. This colony was organized through the efforts of Thomas Hooker and the Fundamental Orders, adopted January 1638-39, the first written constitution emanating from a free people who acknowledged no authority over them save that of God.

These Fundamental Orders, formulated by the men of Windsor, Wethersfield and Hartford, in convention assembled under the direction of Thomas Hooker, are now generally acknowledged, I believe, to be the basis of practically all constitutions governing free peoples, which have been formulated even to this day. When Thomas Hooker stated, "In matters of greater consequence which concern the common good, a general council chosen by all to transact business which concern all, I conceive under favor most suitable to rule and most safe for the relief of the whole," he launched the principles of modern representative government. This fundamental statement of Hooker, surrounded by the seals representing the evolution of the seals of Connecticut, forms the central tablet in the tile floor of our beautiful Memorial Hall in the State Library. From the spacious walls of this room, planned for this purpose, look down the portraits of our several Governors, Stuart's portrait of Washington, and Riley's portrait of Charles II. In especially constructed vaults, also in this room, may be easily seen our historic Charter, our Constitution of 1818 which superceded it and is our present Constitution, the Table on which Lincoln signed the Emancipation Proclamation, and the remarkable Joseph C. Mitchelson collection of coins, medals, etc., recently presented to the State by this loyal son of Connecticut, a successful merchant in Kansas City, Missouri. This Mitchelson Collection, so far as possible, embodies the official records of former days in gold, silver, bronze, and the baser metals.

In 1644 there was added to the Connecticut Colony the Saybrook Colony through Fenwick, and in 1665 the New Haven Colony was added through the provisions of the Royal Charter of 1662, of Charter Oak fame, granted by King Charles II, the

custody of which is in the Connecticut State Library. It was this Charter which granted to Connecticut not only practically an independent government, but an unknown area of territory west to the "Great Sea."

Like the United States, Connecticut has had its many problems, including boundary disputes north, south, east and west, as well as within its borders. It has also had its "Western Lands" with their accompanying problems within its borders and without. Among these the Western Reserve in Ohio, and the Wyoming Valley Region in Pennsylvania, are most conspicuous.

From the "Western Lands" within its immediate bounds additional towns were, from time to time, incorporated by the Connecticut General Assembly, until today the three Connecticut River towns of 1636 are a part of the 169 towns, included in eight counties, each with its own local government consisting of a Board of Selectmen, Town Clerk, and other officials, and each represented in the Connecticut General Assembly, our highest Legislative body.

In addition to the above, each town, or township, in turn had its several school districts, cemetery associations, and ecclesiastical societies, which societies in many cases were the forerunners of the town (township) government, all having official records and official files. To these should be added again special fire and sewer districts which have from time to time been incorporated with their records.

In addition to the files and records of our General Assembly, and the several counties and towns and their subdivisions, there are the files, records and correspondence of our several Governors, Colonial and State; and the files and records of our several State Departments. There should be added the files and records of our Supreme Court of Errors, the several County Courts, Superior and Inferior, City, Town and Borough Courts, Justices Courts, and those of the earlier courts which they superseded; and finally the original files and records of the 115 Probate Districts, among which our 169 towns are divided.

In addition, if you will add to these the mass of records, files and correspondence in which Connecticut has been associated with the mother country, and other countries abroad in colonial days, and with the Federal government, the several states, and various other movements since, we have a glimpse of the public archives situation in Connecticut.

This in brief is the public records and archives situation and problem in Connecticut, which we believe is being gradually and successfully solved through the gradual assembling in our commodious and specially arranged and equipped State Library Building, those official files and records not in current use.

The fact that the laws which have been enacted from time to time as opportunity offered, under which these records are being centralized, arranged, indexed, and bound where necessary, are permissive, in nearly every case, rather than mandatory, both for the public official to deposit and for the State Librarian to receive, results in the best of feelings and heartiest co-operation between all parties concerned. This is the hearty co-operating and good feeling which I intended to emphasize when I began this paper with a brief statement of the present activities of the Connecticut State Library. Whether our laws, facilities and methods are the best for other states, where conditions are different, I take no issue. They do seem to meet our conditions and our requirements in Connecticut in a surprisingly satisfactory manner.

PROGRESS OF LEGISLATION RELATING TO PUBLIC RECORDS

Connecticut began to take notice of the value of her early records and files at an early date, for in 1770 the General Assembly appointed two agents, one of them the son of Governor Trumbull, to collect "all public and other papers relating to the affairs of this colony which properly belong to the colony, in whose custody soever the same may be found, except those in the hands of his honor, the present governor," and in 1771 the General Assembly of Connecticut desired Governor Jonathan Trumbull, then Governor, "To collect all the public letters and papers which may hereafter in any way affect the interests of this colony." These two acts of the Connecticut General Assembly aimed to bring together those official documents prior to 1770 which remained in the hands of the holders of office and their successors and families, as it had been the prevailing usage of public officials to retain papers relating to their official acts. The request made to Governor Trumbull aimed to prevent that practice in the future and bring back to the state any such official papers which might find their way into private hands. It was the papers collected under these two provisions which in 1795 were pre-

sented to the Massachusetts Historical Society, and which in May, 1845, the Connecticut Legislature, by official act, tried to secure from the Massachusetts Historical Society and failed.

In 1849 Connecticut provided for the editing and publication of her Colonial Records from the earliest period to the time of the Charter, 1662, and appointed J. Hammond Trumbull, our first regular State Librarian, as the editor, who published Volumes 1 to 3. It then authorized his successor, the late Charles J. Hoadly, who continued the Colonial Records to 1776, and later authorized him to publish the State Records from 1776 to 1789. Upon the death of Dr. Hoadly in October, 1900, after a service of 45 years, as State Librarian, the present State Librarian, as his successor, was authorized to continue the editing and publication of these State Records to 1789.

It was under this authorization of editing and publishing the Connecticut State Records that the splendid and somewhat unique work of collecting, indexing and binding the Connecticut official records, has been done, for our Committee realized the incompleteness in many ways of the volumes already published, through lack of references and annotations to material extant but not available.

In addition to the publication of the Colonial and State Records, Connecticut authorized the compiling and publishing of a new edition of the Connecticut Special Laws from 1789 to 1880, which was published in eight volumes.

Connecticut early required Clerks of Courts and Town Clerks to have suitable safes or vaults in which to keep their records.

In 1876 provision was made for the fitting celebration in each town, on July Fourth, of the Centennial of the Declaration of American Independence, and directed that suitable sketches of Revolutionary and Centennial History for the several towns be prepared.

In 1886 the Secretary of State and the State Librarian were constituted a committee "to make inquiry or to procure the same to be made, in regard to any ancient, colonial or state records of any courts now or formerly existing; also of any colonial or state records of any of the territorial organizations now or formerly existing within this state, for the purpose of taking measures for the observation and indexing of state records," This committee formally reported in 1889, and this report is still a standard in this field.

In 1895 the General Assembly directed each town clerk to "examine carefully the Town Records of his Town and make a true copy of all that relates to the Revolutionary War in such records between the year 1774 and the year 1784, inclusive, preserving the original spelling and capitals, and the original form of the record as far as may be . . . and certify that it is a true copy of the record and mail the same to the State Librarian at Hartford" These copies, so far as they were returned, have been indexed, bound and are now easily available. The following sixty-three towns complied with this law and sent in extracts from town revolutionary records, 1774-1784.

Ashford	Hartland	Redding
Bolton	Harwinton	Ridgefield
Branford	Hebron	Salisbury
Canaan	Kent	Saybrook
Canterbury	Killingly	Simsbury
Chatham	Killingworth	Southington
Colchester	Lebanon	Stafford
Colebrook	Litchfield	Stamford
Cornwall	Lyme	Stonington
Coventry	Mansfield	Stratford
Danbury	Middletown	Suffield
Derby	Milford	Union
East Haddam	New Hartford	Wallingford
East Windsor	New London	Washington
Enfield	New Milford	Waterbury
Fairfield	Norfolk	Watertown
Farmington	Norwalk	Wethersfield
Goshen	Norwich	Winchester
Groton	Plainfield	Windham
Guilford	Pomfret	Woodbury
Hartford	Preston	Woodstock

In 1899 the General Assembly appointed a Commission of Public Records "to inquire and report to the next General Assembly the condition of the public records of the state, including the court, county, town, society, and parish records, and recommend to the General Assembly of 1901 the best methods of preserving the same from loss or injury."

In 1903 the General Assembly provided for the appointment of a Temporary Examiner of Public Records who was continued in office until 1909. Charles R. Hathaway, as such Temporary

Examiner did excellent work in connection with the public record offices of the state, and in publishing lists of extant court, town and ecclesiastical society records.

In 1911 provision was made for a permanent Examiner of Public Records who should be appointed by the State Librarian for an indefinite term. The State Librarian appointed to this position Colonel Lucius B. Barbour, who is still in office, and to whose interests and labors, with those of his father, General Lucius A. Barbour, in connection with public records, all sons and daughters of Connecticut and their descendants owe so much for his remarkable collection of Connecticut Vital Records now being made quickly and easily accessible.

The official duties of the Connecticut Examiner of Public Records consist not only in seeing that the laws relating to the keeping, care and custody of public records, are respected, but includes the examination and selection of standard paper, inks, typewriter ribbons, loose-leaf binders, and methods of indexing for the official Land Records of Connecticut.

In his first report Mr. Barbour, who entered upon his duties as Examiner of Public Records July 5, 1911, confined his attention to the condition of records, vaults and safes in the offices of the several town clerks and judges of probate throughout the State, based upon personal observation during the fifteen months preceding September 30, 1912, during which time he personally visited and inspected each of these offices.

In his second report for the two years ended September 30, 1914, he confined his attention more especially to the erection of new vaults; the purchase of new safes; the installation of metal equipments; the restoration, repairing, binding, copying and publication of records; the depositing in the State Library of official papers not in current use; and the testing of inks and typewriter ribbons, as directed by the General Assembly of 1913.

In his third report for the two years ended September 30, 1916, in addition to the usual items, he has, as required by the General Assembly of 1915, reported upon the progress being made in compiling general indexes to the land records in the several towns, and specified standard papers for use in the public records of the State. The revised annotated list of Connecticut towns and probate court districts which are printed as appendices to the report will be found of service.

In the following report as in his report for the two years ended September 30, 1918, in addition to the usual items, the Examiner has devoted most of his attention to the subject of Loose Leaf Binders and to the General Index to Land Records as provided for in Chapter 67 of the Public Acts of 1917.

It is a pleasure to note the continued interest in public records and the general desire not only to make these records permanent and easily accessible but to house them in places where they will be safe.

In 1909 the following act was proposed to the Connecticut General Assembly and enacted into law. It has proved a model of its kind:

"Any official of the state or of any county or town, or any other official, may turn over to the state librarian, with his consent, for permanent preservation in the state library, any official books, records, documents, original papers or files, not in current use in his office, taking a receipt therefor, which shall be recorded; and said official may in like manner turn over to the state librarian, with his consent, for use of the state, any printed books, records, documents or reports not in current use in his said office."

In 1917, through Chapter 136, the General Assembly provided for the depositing in the Connecticut State Library all the files and other official papers relating to the Connecticut State Military Census, the State Council of Defense, and other similar organizations in connection with the World War, at which time our Department of Historical Records, under the State Council of Defense, was established under the direction of the State Librarian, which Department the General Assembly of 1919 created a permanent Department of War Records in the State Library.

At the same session the State Librarian was authorized to locate and permanently identify the graves of all soldiers, sailors and marines, veterans of any war, in which the colony of Connecticut or the United States of America has been or may be engaged, who are buried within the limits of this state, and provided for the erection of suitable headstones through the office of the Adjutant General.

AN ACT CONCERNING THE IDENTIFICATION AND MARKING
OF GRAVES OF SOLDIERS, SAILORS AND MARINES.

*Be it enacted by the Senate and House of Representatives in
General Assembly convened:*

The librarian may cause to be located and permanently identified the graves of all soldiers, sailors and marines, veterans of any war in which the colony of Connecticut or the United States of America has been or may be engaged, who are buried within the limits of this state. The sum of ten thousand dollars is appropriated toward carrying out the purposes of this act.

Under the provisions of these acts the record work of Connecticut, through its State Library, has progressed in a most surprising, pleasing and satisfactory manner. Already the judges of the 58 probate districts have deposited the original files, in their custody, of over 100,000 estates, covering the periods from 1641 down to some of them as late as 1914. Each judge determines, in connection with the State Librarian, the periods for which the files shall be sent from his district. There is no uniform period covered in the act.

In addition to the above mentioned activities of the Connecticut State Library, to understand the present situation in Connecticut, these activities should be supplemented by the resources, collections, organizations, activities and publications of the Connecticut Historical Society, The Watkinson Library of Reference, the Connecticut Medical Society, the Trinity College Library, and the Hartford Seminary Foundation Libraries, all in Hartford, and, with the exception of the Historical Society, all in their own buildings; by those of the New Haven Colony Historical Society and the Yale University allied libraries of New Haven, with their own buildings; by those of the New London County Historical Society, and allied libraries of New London, with their buildings; by those of the Bridgeport Scientific and Historical Society of Bridgeport, the Mattatuck Historical Society of Waterbury, the Litchfield Historical Society of Litchfield; the Middlesex County Historical Society, and the Wesleyan University Library of Middletown; also by those of the Winchester Historical Society at Winsted, the Salisbury Association of Salisbury, and of that remarkable and perhaps unique library, the Pequot Library of Southport, Connecticut.

ACCESSIONS

The Connecticut State Library, like its sister State Libraries, acquires its additions through three main channels: exchange, purchase and gift.

A total of 66,675 items have been thus received during the twenty-one months ending June 30, 1920. Of these 7,368 were bound volumes, 24,881 were pamphlets and 34,426 were miscellaneous. The number of pamphlets and miscellaneous items here recorded gives something of an idea of the large number of records and briefs, town, borough and city reports, experiment station and legislative material received. They have been received as follows:

	1918-1919			1919-1920		
	Volumes	Pamphlets	Misc.	Volumes	Pamphlets	Misc.
October,	157	781	189	524	983	333
November,	341	1199	288	472	1076	174
December,	478	1035	517	314	1501	213
January,	384	1677	433	450	1144	493
February,	700	1220	1506	498	1045	1713
March,	294	1417	11389	379	1475	1961
April,	193	1029	7487	287	1072	200
May,	388	1337	4619	289	1601	226
June,	172	1472	403	220	1669	184
July,	300	504	631			
August,	347	990	266	3433	11566	5497
September,	181	654	1201			
Total,	3935	13315	28929			

PURCHASE OF BOOKS

As heretofore in the purchase of books, special attention has been given to our Supreme Court Law Library, the Legislative Reference Department, the Connecticut Section, and the books needed in the work of the several commissions and departments in the Capitol. Special effort has been made to complete our files of American and British Case and Statute Law with the result that our State Library now possesses one of the finest, best arranged and most easily accessible collections to be found.

The fact that Connecticut is interested in all spheres of our Country's activity, requires that so far as possible we have accessible the current law and special reports of those with whom we deal. Our Library is therefore being strengthened along these lines.

SPECIAL COLLECTIONS

Already several departments in the Capitol have turned over to the State Library the separate libraries which they have been maintaining in their offices. These books have been made a part of a larger collection in this library, and being conveniently arranged and catalogued will thus prove of greater service not only to the several departments interested, but also to the public, who thus gain access to them.

LEGISLATIVE REFERENCE DEPARTMENT

Members are reminded that the Special Legislative Reference Department of the State Library, located in the State Library and Supreme Court Building, is at their service. In this department there has been assembled and conveniently arranged for ready reference not only the laws, journals, printed bills, special and departmental reports of Connecticut, but the special reports, literature, laws, and proposed laws relating to the principal questions now before the General Assemblies of the several states. As the material in this section is being added to daily, it is hoped that this department may be used freely.

The following letter, written in reply to one of the several inquiries received asking concerning our special legislative reference work, may serve to show something of what is being done.

Dear Sir:

Replying to your recent inquiry in reference to the work of the Legislative Reference Department here in the Connecticut State Library, I am pleased to report as follows:

There has been no special act creating a Legislative Reference Department in Connecticut other than by making a special appropriation biennially since 1907, at which time the work was especially increased along this line without waiting for a special appropriation so to do. Our work, which has been under the direction of trained assistants, has been in vogue during the past eight sessions of our General Assembly and was inaugurated without special legislation because it was felt that today, as in the early days, the State Library should continue to be among other things a reference library not only for the Supreme Court, state officers, and several state departments, but also for the General Assembly, for the use of which most state libraries were originally founded.

The special work done in our Legislative Reference Department consists in maintaining a well-classified and very full collection of official reports and treatises upon the various topics before our several General Assemblies, all made accessible through a very full card catalogue.

In addition to the printed material which we secure from all sections of this country and from various countries abroad, we maintain a file of the printed bills from about twenty-five states, showing proposed legislation in those states. These bills are filed in vertical file cabinets arranged by subject and alphabetically by states under each subject.

We also make and maintain a photostat copy of every bill, resolution and petition introduced into our General Assembly and a series of cards covering each such bill, resolution and petition, showing its number, when and by whom introduced, to what committee referred, when hearings were advertised, when and what report was made upon it, action in each house and, if passed, when signed by the Governor and its position in the public or special laws. As no bills are printed in Connecticut until favorably reported by the committee to which they have been referred, you will understand that our file of photostat copies of these bills, which copies are made almost immediately after their introduction, is invaluable.

We also have maintained a set of cards on which is found the several sections of our revised statutes. As these several sections are amended or repealed this additional information is carded and filed with the main card. Thus we maintain the material necessary for a revision of our statutes.

We also maintain the typewritten copies of the stenographer's notes at the hearings held before the several committees, so far as they are transcribed for the use of these several committees. These notes, which are maintained on file during the session, are between sessions thoroughly indexed and bound, thus making accessible to future General Assemblies and judges of our courts what was the intention and purpose of each bill as advocated at these hearings.

We prepare special reference lists upon various topics, compile special information along various lines and do not hesitate to draft bills when asked to do so, if a member has definite ideas as to what he desires. Still the drafting of bills is not our special function here in Connecticut as for a great many years our General Assembly has had a Clerk of Bills and an Engrossing Clerk, both officers of experience who have served as clerks and assistant clerks in the House and Senate before becoming Clerk of Bills and then Engrossing Clerk.

Before any bill or resolution is favorably reported by the Committee to which it has been referred, it shall be submitted to the Clerk of Bills.

From time to time when requested by state officials special investigations have been made along definite lines and a report made.

As this library contains about 200,000 bound volumes, over 400,000 pamphlets and over 500,000 miscellaneous items, all of which have been at the service of the members of the General Assembly and others interested, this department has been appreciated and supported without question.

I take pleasure in sending to you under separate cover copy of an issue of the Legislative Bulletin of our last session on which reference is made to this department and attention of members called to the rules of legisla-

tion, a sample of the card on which the daily progress of legislation is maintained and a copy of the proceedings at the laying of the cornerstone of our new State Library and Supreme Court Building which doubtless would not have been secured so soon had it not been for the appreciation of the work which was being done in our State Library.

Hoping sometime to have the pleasure of welcoming you here, and showing you something of the work we are endeavoring to do, I remain

Very respectfully,

GEORGE S. GODARD,
State Librarian.

OFFICIAL INDEX TO STATE LEGISLATION

In my former reports I have called attention to the efforts which were being made by the National Association of State Libraries and the American Association of Law Libraries to formulate and establish a National Legislative Reference Service through which the several subscribers and co-operators might receive a prompt, comprehensive, systematic and reliable legislative intelligence service and at a reasonable cost. The Index to State Legislation is the result of these efforts.

The Official Index to State Legislation, published under the direction of the Joint Committee on National Legislative Information Service of the National Association of State Libraries and American Association of Law Libraries, so successfully issued in 1915 and 1916, owing to the lack of support could not be resumed.

This weekly cumulative index to all legislation enacted and proposed in all of the 42 legislatures in session contained

1. Under each state, a numerical list of all bills and resolutions introduced in each House, showing introduction number, date of introduction, introducer, subject, effect, and chapter number, if enacted, or legislative position at the date of publication of the current number of the Index, or at as late a date as mail transmission makes possible.

This information is arranged so that one desiring to check every item of legislation may do so quickly and be certain not to have missed anything.

2. A classification of all bills by subjects, arranged alphabetically, and a subdivision by states.

Both features have been the subject of exhaustive experimentation for the purpose of achieving the best possible form and the greatest thoroughness.

The data which forms the basis for this weekly cumulative Index to State Legislation was furnished to the editors and compilers by officers of State Legislatures, State Legislative Bureaus, State Librarians, and other state officers. The editing and publishing was done under the direction of the Joint Committee by the Law Reporting Company of New York City, with branches at Washington, Chicago, Kansas City, San Francisco, and New Haven.

It is to be regretted that this Index, which is unique, could not be resumed, for nothing else covers the same ground it did for a relatively small sum, that for which many businesses have paid annually many thousand dollars.

Through this cooperative weekly index the following results were accomplished:

1. It gave prompt and authoritative information regarding all legislation and showed the legislator and attorney what matters of interest to him have been enacted or introduced in one or more states.
2. It made it possible for the legislator and attorney to ascertain promptly what particular laws and bills were of special interest to them.
3. It showed what laws were enacted in the several states many weeks before the session laws are published.
4. It gave in the subject index of the final number for the year a key to all state legislation of the year, a subject index found in no other publication.

It is hoped that the publication of this cooperative index to state legislation may be resumed in the near future. It is needed by legislators, research bureaus, investigators and students, libraries, commercial organizations, and all others interested in legislative action in the several states who desire prompt knowledge of movements looking towards proposed changes in social, economic and correctional matters.

This service, the publication of which has been interrupted largely by war conditions, was proposed at the Lake Minnetonka Conference of state and law librarians, in 1908, and has been developed under the following committee:

- George S. Godard, State Librarian of Connecticut, Chairman*
F. O. Poole, Librarian, Association of the Bar of New York City, Secretary
Charles F. D. Belden, State Librarian of Massachusetts
Herbert O. Brigham, State Librarian of Rhode Island
John A. Lapp, Director, Indiana Bureau of Legislative Information
A. J. Small, Law and Legislative Reference Department, Iowa State Library

PUBLIC AFFAIRS INFORMATION SERVICE AND THE INDEX TO STATE LEGISLATION DISTINGUISHED

As the following letter will serve to answer various questions which come to me from time to time it seems best to include it in this report as the Connecticut State Library has been closely identified with both services from their inception.

November 6, 1916.

JAMES L. KING, ESQ.,
State Librarian,
Topeka, Kan.

My dear Mr. King:

Yours of 27th ult. asking concerning the Index to State Legislation and the Public Affairs Information Service received. Owing to the fact that I have been out of town for a couple of days this last week you have not heard from me before.

The Public Affairs Information Service, which issues a weekly bulletin, is a coöperative clearing house of public affairs information conducted by interested institutions in all parts of the country and is published by the H. W. Wilson Company of White Plains, N. Y., under the direction of a supervising committee of three members elected by the coöperators.

As you know, these bulletins call attention to special reports, bibliographies, treatises and other publications along definite lines, telling where the same may be secured and giving an opportunity for the several coöperators to check such items as they may especially desire to receive when the Public Affairs Information Service will send to the ones responsible for the publications desired labels bearing the addresses of those coöperators who desire to receive these special reports. You will note that very little, if anything, is stated or reported regarding current legislation for the Public Affairs Information Service has thus far made little or no attempt to follow current legislation. This service is furnished at one hundred dollars a year, payable quarterly if so desired. It is the result of a movement started by a few of us at the Kaaterskill meeting of the American Library Association and allied associations.

The Index to State Legislation on the other hand is an entirely different service. It was originated and has been developed by a joint committee of the state librarians and law librarians who have been able through the coöperation and support of the Law Reporting Company of 74 Broadway, New York City, to bring the Index to its present state of completeness.

This service has heretofore been made possible only through the coöperation of the several state libraries or legislative reference libraries, where there were such as were able to do it, sending in to the Law Reporting Company their journals, printed bills, calendars, etc., thus coöperating to the fullest extent possible. The report upon this Index which you have received I think calls your attention to the great amount of work which has been done in developing this Index and the large amount of

money actually expended is simply intimated but I may say to you confidentially that Mr. Allen of the Law Reporting Company has been so much interested in this project and in making accessible the trend and results of current legislation in the several states that he has personally contributed something over thirty thousand dollars in bringing the Index to its present state of perfection. Now that it has been shown that the Index is feasible, practical and needed he feels, as does the joint committee, that this Index ought to be self-supporting and has therefore asked that the several state libraries and legislative reference departments, so far as possible, not only cooperate by sending the legislation and matters pertaining thereto from their own states to the editors of the Index but if possible contribute in 1917 two hundred dollars in addition. If this is impossible it is the desire of the committee that you so state but by all means we want Kansas to cooperate to the fullest extent in order that the Index to State Legislation may be continued until such time as the editors can afford to send it free to cooperating libraries as has been done for the past year or two, for it is hoped that the total expense of publication may be in the near future borne by outside interests.

I have gone into this explanation rather at length because it happens to be my lot to be a member of the committee having in charge both the Public Affairs Information Service and the Index to State Legislation and right here permit me to say that the Connecticut State Library pays exactly the same for both services as you are asked to pay and in addition contributes the services and incidental expenses of its State Librarian in attendance at these meetings and in performing such work as is necessary by correspondence. The same is true of the other members of these committees.

Trusting I have made myself understood and at the same time have shown the matter up in such a way as will enable you to cooperate with us in the Index to State Legislation, I remain

With kindest regards,

Very sincerely,

GEO. S. GODARD,
State Librarian.

ARCHIVES AND MANUSCRIPTS

The work of calendaring, arranging, indexing, and where necessary binding the original official and semi-official manuscript material which has been in the Library for many years, or more recently transferred from the various departments in the Capitol, or from various courts, societies or individuals, is progressing as rapidly as the work, circumstances and funds available will permit. The large number of such papers and records which have been so treated, the number of volumes assembled, and the elaborate and

minute indexes made, have been the admiration of all those interested in original and legal research, or the care of records, who have had occasion to use them. Effort is made to include in these indexes and definitely locate the name of every subject, every place, and every individual mentioned, and to note each autograph and seal.

A select list of such manuscripts and records, and the rules which have been formulated by our Archives Department for the arranging, cataloging and indexing of such papers, were published as appendices in my last report. The Select List of Manuscripts was also printed separately as Connecticut State Library Bulletin No. 9, consisting of 36 pages with index. The Instructions for Care of Archives was reprinted as Bulletin No. 8, and consisted of 16 pages with index.

PORTRAIT OF GOVERNOR MARCUS H. HOLCOMB

The portrait of Governor Marcus H. Holcomb was placed in Memorial Hall Saturday afternoon, July 3rd, in the presence of the Governor and of the artist, Miss Bessie Maie Weaver, whose studio is in Holyoke, Mass., with a summer studio in New Hartford.

Miss Weaver, who is a niece of Governor Holcomb, was born in New Hartford, Conn., and is the daughter of Governor Holcomb's only sister and her husband, the late Professor Sterrie A. Weaver, originator of the Weaver System of Music for Public Schools.

Miss Weaver is a graduate of the Massachusetts Normal Art School, studied portraiture under George T. Collins of New York; and Seaman and Menard of Paris. She also studied miniature under Mme. La Forge of Paris.

PICTURE OF PRESIDENT LINCOLN

The history of the framed picture of Lincoln now hanging in the vault near the Emancipation Table presented by Hon. Daniel Nash Morgan, Ex-Treasurer of the United States, is given in the following letter from Misses Ada and Mary Taylor.

My Dear Mr. Godard:

The picture of Abraham Lincoln which my sister and I are sending you belonged to his Secretary of the Navy Gideon Welles. After Mr. Welles' death his wife gave it to my mother (Mrs. Samuel Taylor.) My sister and I take much pleasure in giving it to you for your Lincoln Corner in the State Library. Believe me

Sincerely yours,

MARY CURTIN TAYLOR.

Hartford, March the Fourth, 1919

PORTRAIT OF GIDEON WELLES

Through the favor of Miss Alice Welles of New York, granddaughter of Gideon Welles, Secretary of the Navy under President Lincoln and President Johnson, the State has been presented through Governor Holcomb, with a portrait of Secretary Welles, painted by the late Charles Noel Flagg. The following letter of acknowledgment is here printed for purpose of record.

December 27, 1919

MISS ALICE WELLES,
54 EAST 67TH ST.,
NEW YORK CITY.

My dear Miss Welles:

It gives me pleasure to acknowledge with our best thanks the beautiful oil portrait, probably by the late C. N. Flagg, of Ex-Secretary of Navy Gideon Welles, your grandfather, which you presented to the State of Connecticut through Governor Marcus H. Holcomb.

This portrait we have had cleaned by Miss Ellen Earle Flagg, daughter of Mr. Flagg, who was in the midst of cleaning and revarnishing our other portraits here in the State Library. It now hangs in our Memorial Hall at the right of the vault in which is exhibited the table on which President Lincoln signed the Emancipation Proclamation, with other Lincoln and patriotic items, and facing the portrait of General Albert H. Terry. A suitable name-plate will be prepared and mounted on the frame, of course noting that the portrait was presented by you, his granddaughter. If you have any special form in which you would like to have the gift expressed, please advise me concerning it.

Again thanking you for the portrait, which is appreciated and a real addition to our collection, I remain

Very respectfully,

GEO. S. GODARD

State Librarian.

PORTRAIT OF KING CHARLES II

Through the favor, generosity, persistency and loyalty of Clarence Winthrop Bowen, a native of Woodstock, Connecticut, and resident of New York City, Connecticut has been presented with a most beautiful and valuable portrait of Charles II, King of England 1649-1685, painted by the contemporaneous artist, John Riley (1646-1691). A brief statement concerning its discovery by Mr. Bowen and its arrival in Hartford is found in the following correspondence.

HARTFORD, FEB. 4, 1920.

CLARENCE W. BOWEN, ESQ.
5 EAST 63D STREET,
NEW YORK, N. Y.

My dear Mr. Bowen:

I cannot tell you how pleased we are with the portrait of Charles II by Riley which it has been our privilege to add to our collection here in Memorial Hall through your favor.

Yesterday morning the portrait was placed in position at the left of the entrance as you go into Memorial Hall. This is the position formerly occupied by the portrait of Governor Saltonstall, and a little later by Sir Edmond Andros when we hung Flagg's portrait of Secretary of the Navy Gideon Welles, recently presented by his granddaughter, at the right of the Emancipation Table vault. It faces the old Charter, and when one stands near the old Charter, it is on the right of the entrance.

This means that Andros now leads the line of Governors, his portrait being placed directly over the entrance into my office, and the Saltonstall portrait takes its chronological place in the group to which he belonged.

I wish you could hear the comments which are unconsciously uttered as people stand in front of that canvas and take in its richness. We feel that the State of Connecticut is most fortunate in having a son who is so thoughtful as to desire, and so persistent in his efforts as to enable him to place this gem in our collection in Memorial Hall, and it is most fitting that it should face the old Charter which was granted through his royal favor.

Right here we should not forget that his "Favor" was made possible principally through the efforts of one, John Winthrop, who was a student of men who knew exactly what he wanted, and knew how to get it: Apparently his name-sake has inherited some of these qualities, and Connecticut is again receiving benefits from the same.

Governor Holcomb, who viewed the portrait immediately after it was placed in position, was much pleased as well as surprised. I assume you have already heard from him expressing his thanks in a little more formal manner in behalf of the state than I am doing herewith.



CONNECTICUT STATE LIBRARY, HARTFORD.

GEORGE S. GODARD, *Librarian*.

Riley's Portrait of King Charles II. Presented by Clarence Winthrop Bowen, LL.D.
Facing page 30

The "Documentary History" which you forwarded, I will have properly arranged in book form in order that we may have a fitting history, as you intended we should have, of this beautiful portrait.

In order that we may have a fitting plate for this portrait, I am going to ask you to formulate what you would like to have engraved upon it.

Again thanking you for your favor and generous gift, and hoping it may be my pleasure to welcome you here in the near future, I remain

Very sincerely,

GEO. S. GODARD,
State Librarian.

DEPOSITORY OF THE CARNEGIE INSTITUTION OF WASHINGTON

This selection of the Connecticut State Library as a Depository for the official publications of the Carnegie Institution of Washington is another testimonial of the standing of our State Library among the libraries of the world.

CARNEGIE INSTITUTION OF WASHINGTON,
WASHINGTON, D. C.
February 11, 1920

MR. GEO. S. GODARD, *Librarian*,
Connecticut State Library,
Hartford, Connecticut.

My dear Mr. Godard:

Your letter of February 6th has been received and I have pleasure in advising you that it appears practicable to the President of the Institution to recommend to our Executive Committee that the Connecticut State Library be added to the mailing list for distribution of publications of the Institution. This recommendation will be submitted to the committee at its next meeting and we hope that before many weeks it will be possible for us to prepare and make initial shipment.

With kind regards,

Very truly yours,
WALTER M. GILBERT,
Assistant Secretary.

P. S.

In the meantime may I ask you to make use of the accompanying printed list of our publications as a checklist in indicating to us the publications which are already in your Library? I assume that you will desire us to complete this set for you if practicable.

STATUTES, CODES AND DIGESTS

While we are able to secure many series of reports and statutes upon exchange account, there are increasing numbers of these items which not being published by the states — but by private publishers — must be purchased. As a rule, the longer the delay in purchasing, the greater the cost when finally secured. This is aggravatingly true in the purchase of session laws and early statutes. The following letter to our exchanges calling attention of the "1918 Revision of Connecticut Statutes" will explain itself.

HARTFORD, Nov. 20, 1918.

Dear Sir:

The State Librarian has been furnished a limited number of copies of the 1918 Revision of Connecticut Statutes for exchange purposes. Two volumes and a Table of References, showing where sections of the 1902 Revision and the intervening session laws may be found in the new revision, are now ready. Volume 3, containing the index, will be ready at an early date.

Our records show that the revision of the statutes of your state now upon our shelves did not come through exchange but was purchased. Is any provision made by your state whereby you can send upon exchange to the Connecticut State Library a copy of your last revision? What was the official designation of your last revision?

Your early attention is requested for I desire to arrange to send you at an early date a copy of the new 1918 Connecticut Revision if you are entitled to receive the same.

Very sincerely yours,

GEO. S. GODARD,
State Librarian.

STANDARD INDEX TO STATUTES AND CODES

It is to be hoped that in the near future there may be evolved a standard index, which can be used in connection with the statutes or codes of all states. It should be possible for the judge and attorney of any state to consult the statute or code of any other state by means of cross references in these indexes, which shall contain the local terminology found in the several states.

There is no question as to the possibility and desirability of such a standard index to American Statute Law. It is hoped the American Bar Association may take under its consideration such an index or classification.

BIBLIOGRAPHY OF AMERICAN STATUTE LAW

Law has been said to be chrystallized public opinion and is changed in statement and interpretation as directed and warranted by a changing public opinion.

There is no better record of the evolution of the public opinion of a community or state than that embodied in a file of the statutes and legal decisions of that state. Every state legislature is compelled from time to time to enact laws the contents of which have been repeatedly disregarded at first and later defeated. Hence the importance of collections of American Statute Law for the use—not only of the judge and attorney—but also of the historian. The number of laws passed, amended, repealed and superseded in the Colonies and States of the American Union, since early days, is simply appalling. It is most fortunate therefore that there have been two or three men who have made a special study of editions of American Statute Law and have notes and material at hand on which to formulate and compile an historical bibliography of the subject.

It is gratifying to know that there is a possibility of such an historical bibliography being undertaken by that dean of bibliographers of American Statute Law, Mr. T. L. Cole, President of the Statute Law Book Company. It is to be hoped that satisfactory arrangements can be made with some Foundation or Institution which will enable the work to be undertaken and completed in the near future.

AN ACT CONCERNING A DEPARTMENT OF WAR RECORDS IN THE STATE LIBRARY.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. The state library shall maintain a department of war records, whose purpose and duty shall be to collect, classify, index and install in the library all available material relating to Connecticut participation, public or private, in the world war and thus to establish a permanent and accessible record of its extent and character, such record to be as complete and comprehensive as possible and to cover not only the activities of the state, its subdivisions and agencies but also of Connecticut agencies of the federal government, organizations of private persons and of those individuals who were direct participants in the great struggle, whether as soldiers, sailors, aviators or otherwise.

Sec. 2. Said department shall be under the management and control of a committee consisting of eight or more members of which the state

librarian shall be a member and its chairman and executive head. The remaining members of the committee shall be appointed by the state librarian with the approval of the state library committee. They shall serve without compensation except that their necessary expenses incurred in the performance of their duties shall be paid.

Sec. 3. Whenever the appropriation or appropriations made by the general assembly for the purpose of carrying on the work of said department shall prove insufficient, the state board of control shall from time to time make such further appropriations as may be reasonably needed for that purpose and said board is authorized to make such additional appropriations by a majority vote of its members.

Sec. 4. The sum of twenty thousand dollars is appropriated to defray the expenses incurred by said department during the fiscal year ending September 30, 1919.

Sec. 5. This act shall take effect from its passage.

DEPARTMENT OF HISTORICAL RECORDS

The following letter was sent to the Chairman of the several Town War Bureaus, asking for summaries of their work:

CONNECTICUT STATE COUNCIL OF DEFENSE,
STATE CAPITOL,
HARTFORD, CONNECTICUT,
November 14, 1918.

Gentlemen:

At a meeting of the Committee on Historical Records relating to Connecticut's activities in the present world crisis, held at the State Library on the 2nd inst., the State Librarian, as Chairman of this Committee, was directed to communicate with the several committees and departments which have been created by the Connecticut State Council of Defense and secure from them a full statement covering the work accomplished or in progress and report the same at the next meeting. Your report will be essential to an adequate understanding of that branch of service represented by your committee and is needed for immediate use.

We are all interested in having available when needed the material necessary to formulate a true and adequate narrative of the part it has been Connecticut's duty and privilege to take. It is the duty of the Department of Historical Records to see that such official and reliable data is secured and made available here in our State Library. Your early and interested coöperation is requested and will be appreciated.

A copy of this same report is needed at once by Mr. H. M. Wriston, Assistant Manager of the State Council of Defense, who has in hand the immediate preparation of the official report to the Governor covering all branches of work under the Council. If you have already transmitted to Mr. Wriston direct such a report, it will serve the purpose of the Department of Historical Records.

Very respectfully,

GEO. S. GODARD,

State Librarian and Chairman Committee on Historical Records.

YALE IN THE WORLD WAR FILM

The Yale Alumni University Fund Association, through its Secretary, George E. Thompson of 280 Madison Ave., New York City, has contributed one of its two sets of "Yale in the War" films to the Connecticut State Library as a contribution to the Department of War Records, relating to Connecticut Participation in the World War. This film, which is composed of two parts, will be safely cared for with other records in the State Library.

A promise has been received from the government at Washington that a set of the government War Films will also be sent to the Department of War Records where such material is being assembled relating to the activities of Connecticut in various lines.

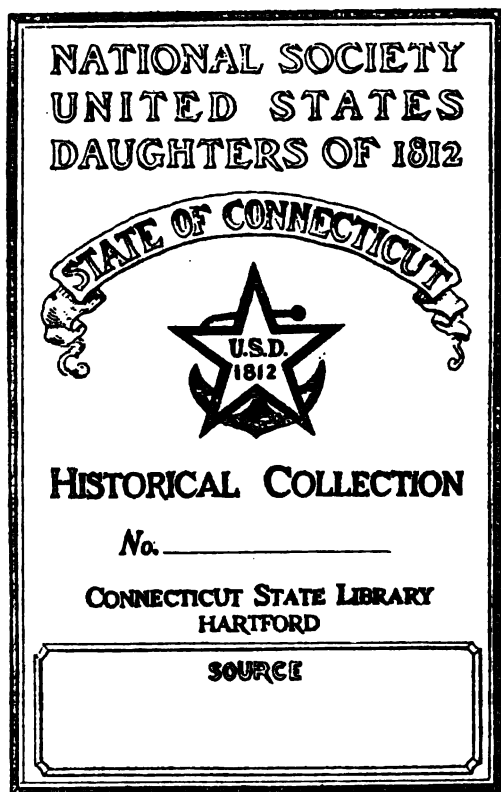
MILITARY ORDER FOREIGN WARS HISTORICAL COLLECTION

The historical collection of the Connecticut Commandery of the Military Order of Foreign Wars of the United States, which finds its home and attracts so much attention in Memorial Hall in the State Library, and is a part of the Department of War Records and supplements in many ways the remarkable Joseph C. Mitchelson Collection of coins, medals and tokens, had its beginnings in the thoughtfulness and foresight of Major Howard A. Giddings of this city, retiring Secretary of the Connecticut Commandery. Through his efforts many who had seen service in the World War and other wars, or had ancestors who had seen service, were induced to contribute to this remarkable collection which now occupies nearly 300 square feet, resulting from the contributions of over 125 different persons or associations. While it has not been possible to show all of the exhibits all of the time, important portions of it are always on exhibition in the 17 cases arranged in Memorial Hall and in the main hall on the ground floor.

While of necessity the major part of the exhibit is connected with the World War, there are many interesting exhibits connected with former wars with which the United States or the thirteen original colonies have been connected, back to and including the early French and Indian Wars.

UNITED STATES DAUGHTERS OF 1812 COLLECTION

The National Society, United States Daughters of 1812, State of Connecticut, has received from William F. Hopson of New Haven, the well known engraver, the first prints from its new copper plate engraved for the Society by Mr. Hopson. This plate, which also bears the insignia of the National Order, will



CONNECTICUT STATE LIBRARY, HARTFORD.

Bookplate of
Connecticut Society Daughters of 1812.

be used in connection with the historical collection of the Society in the Connecticut State Library. Provision has been made on the plate for the name of the donor of each item.

This book plate is a fitting companion to the other plates used

in the State Library, all of which were engraved by Mr. Hopson, which are as follows: the regular State Library Book Plate, and those of the Major Charles T. Wells Collection, the William F. J. Boardman Collection, and the Dwight C. Kilbourn Collection, all of which are historical and emblematic in their composition.

The collection of the Connecticut Society, Daughters of 1812, in the Connecticut State Library is of necessity, at least for the present, limited to printed, engraved or manuscript material, and coins and medals.

GRAND ARMY OF THE REPUBLIC RECORDS AND PROCEEDINGS

The following correspondence will serve as a record of the source, method of securing and arranging our collection of Grand Army of Republic records, reports, proceedings and scrap-books.

July 30, 1918.

W. M. BARNUM, *Asst. Adjutant-General*,
Department of Conn. G. A. R.,
842 Lindley St.,
Bridgeport, Conn.

My dear Mr. Barnum:

I am pleased to report that we have brought to the State Library the collection of G. A. R. material which was in one of the rooms on the fifth floor in the Capitol and sorted the same. I am enclosing a list of the proceedings and journals of the National G. A. R. Encampment and the encampments of the several states. Thus, you will notice that of Arizona we have only the proceedings of 1898; of Alabama and Arkansas none; of California and Nevada we have quite a run.

It occurred to me that you might be able at the forthcoming national encampment to start a movement whereby the several files might be completed in order that we may have the same substantially bound by states in volumes of convenient size, for if these files are not completed now it will be very difficult to complete them in years to come. I hope therefore you will take the matter up with the proper representatives or if it seems best that you representing the Connecticut Grand Encampment of the G. A. R. will write to the secretaries of the other state encampments asking them for the necessary numbers to complete our files. This request might be supplemented with the statement that it was proposed to substantially bind the journals and proceedings of the several encampments in volumes of convenient size.

You will note that we are also enclosing a list of the rosters which we have on file. Whether or not you think it will be best to attempt to complete the files of the rosters I will leave that with you.

Yours very truly,

GEO. S. GODARD,

State Librarian.

August 16, 1918

WILLIAM M. BARNUM, *Asst. Adjutant-General,*

Department of Conn. G. A. R.,

842 Lindley St.,

Bridgeport, Conn.

My dear Mr. Barnum:

We have practically finished sorting out the printed and manuscript material of the G. A. R. collection which you sent to us and which we brought to the library from the Capitol. In this material we find quite a number of record books with only a comparatively few pages of writing in each. Would it not be a good plan to combine in volumes of convenient size the actual records of the several posts than to have so many separate volumes containing so large a proportion of blank leaves?

If this meets with your approval I will combine these records and have them bound, properly labeled and lettered, so that we can see at once from the lettering on the back exactly what posts are covered by the several volumes. These will be thoroughly indexed and made a collection which will be harmonious, easily cared for and accessible.

Do you know of any other G. A. R. post records which we ought to have or which are needed to complete volumes which we now have? Do you know of any other collection of printed G. A. R. proceedings which should go with this collection in order to complete the files of the G. A. R. proceedings of the several states? I am anxious to have the several files completed in order that the proceedings may also be brought together in volumes of convenient size, made easily available and easily cared for for these volumes must be put into proper shape while in the hands of those who are especially interested in them.

Thanking you for your early favor, I remain

Very sincerely,

GEO. S. GODARD,

State Librarian.

RECEPTION TO NATIONAL CONGRESS OF THE SONS OF THE AMERICAN REVOLUTION

The following letter to the Ruth Wyllys Chapter D. A. R., Hartford, which gave a reception in the State Library to the delegates to the National Congress S. A. R. and friends, when meeting in Hartford, in reply to the Regent's letter of thanks and appreciation, may prove of interest in the days to come.

May 27, 1920.

MISS FLORENCE S. M. CROFUT,
Regent Ruth Wyllys Chapter, D. A. R.,
Hartford, Connecticut.

My dear Miss Crofut:

I am pleased to acknowledge receipt of your very kind favor of the 25th inst. which my assistants and I appreciate very much, for while we



CONNECTICUT STATE LIBRARY, HARTFORD.

Bookplate of
DWIGHT C. KILBOURN Collection

only tried to do our duty to the Ruth Wyllys Chapter and its members, to the National Society S. A. R. and its delegates, to the Jeremiah Wadsworth Branch S. A. R. and its members, we also tried to do our duty to the State of Connecticut, for we all felt confident that while you were

somewhat acquainted with our building, our resources and our methods of work, yet you did not really know either it or them. So we made this an occasion to accomplish the desired end so far as we were able, and it is a pleasure to know that we were somewhat successful in doing it.

It may be a source of pleasure and possibly some pride to you and your Associates to know that yours was the first public reception given in our State Library and Supreme Court Building in the evening to which ladies have been invited. The brightness from the bulbs above reflecting from the beauty below, was increased by the dignified surroundings. Come again!

So far as I know, no expense was incurred for the Ruth Wyllys Chapter by us, for I will take care of the attendants in the two check rooms.

In regard to the Military Roll from Massachusetts, I was present at the meeting of the conference when Mr. Walker B. Watkins, President of the Massachusetts Society, S. A. R., presented these rolls to the Connecticut Society, and I understood, intended to bring them to the Library. I did not understand they were intended for the D. A. R. records. However, in case of doubt the records of the conference, which will soon be available, will disclose the intentions.

Thank you for copying the seven sets of D. A. R. Military Records which came in after our girls had completed their work of copying. I assume these will be brought or sent to the Library at your convenience, if they are not already here.

Congratulating you and your associates upon the success of the reception, and feeling that I could have been of more service as a guide than as a wall flower in the receiving line, I remain

Very sincerely,

GEO. S. GODARD,

State Librarian and Director.

CENTENNIAL RECORDS OF ODD FELLOWSHIP

E. D. Howland, Secretary, of Wethersfield, has deposited in the State Library for safe keeping until the next centennial in 2019 the copper box containing the proceedings of the Centennial exercises commemorating 100 years of Odd Fellowship in America. The box is 12" long, 8½" wide and 2½" deep.

The cover of this box, which is soldered on, bears the following inscription:

This box contains
An account of the celebration of the
100th Anniversary
of the
Birth of Odd Fellowship in America
which took place in
Hartford, Connecticut, April 26, 1919

And is placed in the custody of the State Librarian of Connecticut with the respectful request that it be not opened until April 26th, 2019.



CONNECTICUT STATE LIBRARY, HARTFORD.

Bookplate of
CHARLES T. WELLS Collection

CONNECTICUT CHURCH RECORDS

The following letter and historical note will serve as an example of the forms used in connection with the acknowledging and depositing of the records and other official publications of our Connecticut Churches and Ecclesiastical Societies.

EAST WINDSOR CHURCH RECORDS

April 29, '20

Miss ELVIRA C. CLAPP, *Clerk*,
East Windsor Hill, Conn.

My dear Miss Clapp:

This is to acknowledge receipt of the Treasurer's Account Book of the First Ecclesiastical Society, East Windsor, Conn., from 1754 to 1898, 1 volume which you brought to the Connecticut State Library this morning under authority of Chapter 175 of the Public Acts of 1909, relating to the care and custody of public records, and in accord with the action of the First Congregational Church of South Windsor held on Thursday, January 6, 1916, under which action preceding volumes of your Society records have been deposited. This volume will be placed with those already deposited, as will those which may be deposited hereafter.

Very sincerely,

GEO. S. GODARD,
State Librarian.

IMMANUEL CONGREGATIONAL CHURCH, INCORPORATED,
RECORDS.

This volume of records of the Pearl Street Congregational Society (1851-1901) which, by legislative act, Connecticut Special Laws, 1901 (No. 27) became the Farmington Avenue Congregational Society (1901-1913) was deposited in the Connecticut State Library, October 21, 1919, by Registrar Leverett Belknap under authority of a vote of the Immanuel Congregational Church, Incorporated, which succeeded the above mentioned societies on June 10, 1913, at the regular meeting held January 9, 1919, which vote provided for the depositing in the Connecticut State Library, from time to time, of records of the Immanuel Congregational Church, Incorporated, as completed, and all records of its predecessors as from time to time they may be secured.

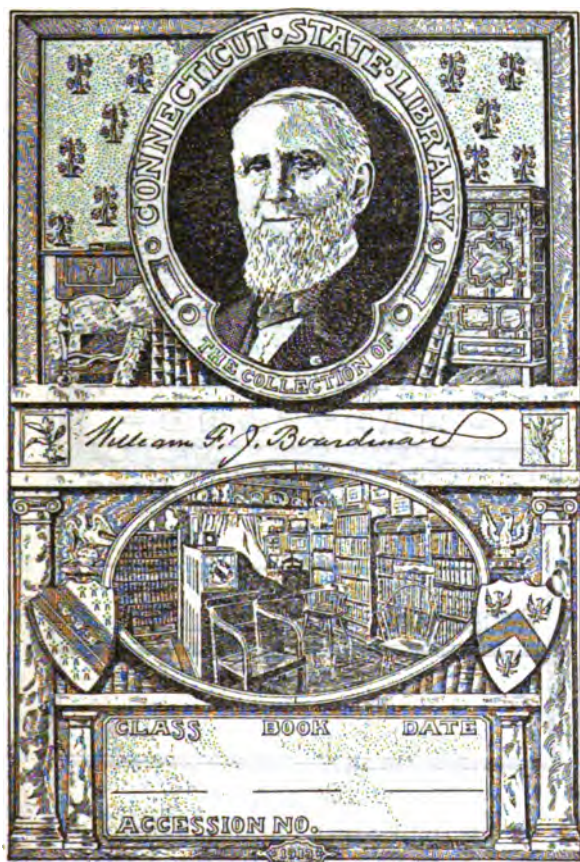
The Farmington Avenue Congregational Society ceased to exist on June 10, 1913, when, by a vote of the Farmington Avenue Congregational Society as such, and the Farmington Avenue Congregational Church, both were united under the corporate name of the Farmington Avenue Congregational Church, Incorporated. The Farmington Avenue Congregational Church, Incorporated, and the Park Congregational Church united on April 23, 1914. Rev. Charles Francis Carter, formerly pastor of the Park Church, became pastor of the united Church. On June 11, 1914, the members voted to change the name to the Immanuel Congregational Church, Incorporated.

(Signed) GEO. S. GODARD,
State Librarian.

Deposited in
CONNECTICUT STATE LIBRARY
October 21, 1919.

THE DR. THOMAS HALL COLLECTION OF CONNECTICUT COPPER CENTS

A very interesting and important addition was made to the Joseph C. Mitchelson Collection of coins, medals, tokens, currency, etc., in the Connecticut State Library, when the unique



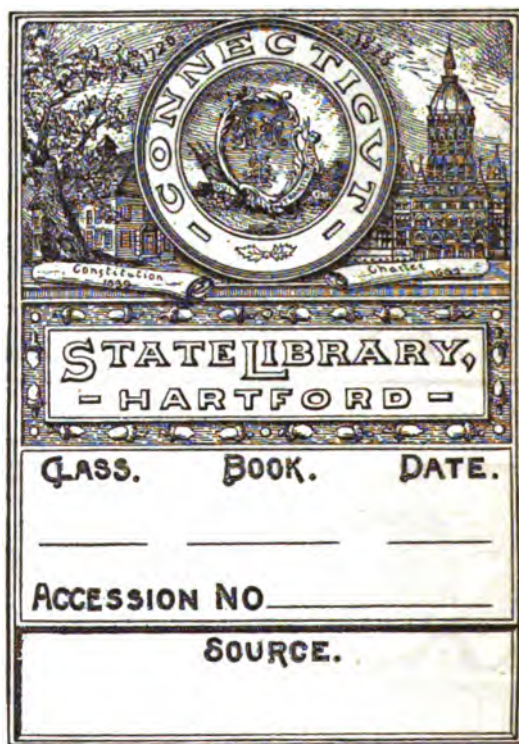
CONNECTICUT STATE LIBRARY, HARTFORD.

Bookplate of
WILLIAM F. J. BOARDMAN Collection

collection of Connecticut copper cents minted by the State of Connecticut during the years 1785, 1786, 1787 and 1788, made by the late Dr. Thomas Hall of Boston, together with his manuscript volume containing critical notes relating to these

several issues of Connecticut cents, was added to the collection. There are 126 different varieties of these Connecticut coppers, viz.: 24 minted in 1785, 16 minted in 1786, 58 minted in 1787, and 28 minted in 1788.

Dr. Hall was one of the greatest authorities on American coinage and became so interested in the Connecticut coinage that



Bookplate of
CONNECTICUT STATE LIBRARY, HARTFORD.
GEORGE S. GODARD, *Librarian*.

in 1892 he privately printed for additions and corrections a descriptive list of the coppers issued by authority for the State of Connecticut for the year 1787, the year of the greatest number of different issues. A copy of this volume came with the collection from Mr. Mitchelson. The volume is probably the only critical one published devoted exclusively to Connecticut coinage.

The manuscript volume containing the critical notes, accompanying this collection of 126 coins, upon the death of Dr. Hall came into the possession of the late Robert Bird, Town Treasurer of Canton, Mass., together with a large number of other coins and medals. Upon the death of Dr. Bird the Connecticut collection and records were purchased with other coins in 1918 by Frank H. Shumway of Mattapan, Mass., who is a native of Windham, Conn. The State Library secured the collection from Mr. Shumway.

The manuscript volume of critical notes is of special value in that not only is each specimen minutely described with special notes covering the issue but the degree of rarity of each is indicated in the following manner: A coin is considered common when he has actually seen more than 30 specimens; rare when he has met with 30 specimens; exceedingly rare when he has met but one and he has indicated in his record how many of each specimen he has seen and examined. The different degrees of rarity are based on 20, 15, 10, 6, 2 or 3 and 1 specimen.

DISPOSITION OF DUPLICATE EXCHANGES

The following letter to the Yale University Library states our practice in the disposition of duplicate and some of our foreign exchanges:

February 20, 1918.

C. J. BARR, *Assistant Librarian*,
Yale University,
New Haven, Conn.

My dear Mr. Barr:

I am pleased to acknowledge receipt of your favor of 19th inst. in reference to Legislative Reference material and other publications which we have heretofore and may yet be able to send to you from time to time.

As many of the publications, especially the foreign, which I have heretofore sent to you and which I am planning to send to you in the future are not duplicates but represent the only copies which we have I would not wish to have any which might prove duplicates with you used for exchange purposes with other libraries. I would prefer to have them returned, in order that we might use them either here or elsewhere where they would be of greatest service.

Because I have no authority to let go beyond the limits of the state material which is received upon exchange account and it would not look right and certainly it would not be right to turn such material over to Yale University, or any other library, to be used by them for exchange

purposes. I think you understand my position, which, in brief, is this, that I am anxious to have the people of Connecticut and their sons and daughters have the greatest library service possible, not necessarily in one library but in connection with all the libraries of the state and if, as in the present case, the very large foreign collection of Yale University can be bettered by the few publications along these lines which come to us by special arrangement, it would seem to be my duty to help strengthen your collection rather than retain a very small collection here. Connecticut is not a large state, therefore, we can do things here which would not be advisable in states which are very large and where transportation is long, tedious and expensive.

If you can do so, I would prefer to have a list of such documents and publications as prove to be duplicates returned to me in order that I may advise concerning their disposition. If this arrangement meets with the approval of the authorities of the Yale University Library, I wish you would advise me at your earliest convenience, in order that I may be governed accordingly in connection with the shipment I am now preparing.

I will advise you when we have received the Susquehanna Case which I can assure you we appreciate your having sent to us upon exchange account.

With kindest regards and best wishes, I remain,

Very sincerely,

GEO. S. GODARD,

State Librarian.

DUPLICATE REQUESTS

In order that the several officials who have furnished our exchange division with copies of their publications, to be forwarded to our regular exchanges as soon as possible after publication, may understand why they have had in a few cases separate requests for the same publications from certain libraries, which have already received them through our department, I may state that since the publication of the "Monthly List of State Publications" by the Library of Congress, it has been an easy matter to write to the several states for current departmental reports, and very easy for the clerk, who writes, not to distinguish between those states which have a prompt and careful exchange service and those states which do not. The following letter, written to one of these thoughtlessly offending brothers, may prove to be mutually helpful:

My dear:—

Your circular request of 12th inst. to our Secretary of State was referred by that official to our State Comptroller and by him to this department. I am pleased to state that everything is sent regularly and, as

you stated at the Ottawa meeting, promptly to your Legislative Reference Department as one of our regular exchanges, and will continue to be.

Right here permit me to call your attention to what I endeavored to emphasize at the Ottawa meeting; viz., that where a state has an exchange department which is serving its several exchanges very acceptably, or commendably so, don't you think it is a little unfair to permit circular letters intended for states which have no such regularly established exchange departments to be sent to all indiscriminately? Can't you see that this letter of yours thoughtlessly sent casts reflection on the service which you have been receiving from this department both in the office of the

STATE LIBRARY.



NEW HAVEN.



Bookplate used in Connecticut State
Library in Capitol at New Haven.
There was a similar one for the
State Library in Hartford.

Secretary of State and the offices of our State Comptroller, for it implies that you are not receiving a satisfactory service, which you stated you were, and which I believe you are?

If you knew how hard it was to get even a few copies of certain publications to send to our exchanges, I think you would see to it that letters of this character hereafter were cut out so far as Connecticut goes, for a few circular letters from different states intended for delinquent exchanges, although, as above stated thoughtlessly sent, will undermine the work of and confidence in a department which required years of thought, planning and work to build up.

Please make note that in future if you have any special requests that you send them direct to this department.

I have spoken thus a little at length and with some feeling in the matter because it makes little difference how many conferences we may have or how many papers read upon the subject of coöperation between legislative reference departments or between state libraries if the suggestions made in those papers and conferences are not carried out with some degree of discrimination.

Trusting you reached home safely, I remain

With best wishes,

Very sincerely yours,

GEO. S. GODARD,

State Librarian.

IMPOSTORS

It is but natural that from time to time attempts should be made by covetous persons to secure for private gain valuable and out of print publications, by writing to the State Librarian and other public officials, representing themselves to be public or memorial libraries.

These requests are usually quite self-evident, and correspondence with the postmaster or the neighboring public library frequently brings an answer similar to the following, which was recently received in response to such an inquiry:

I do not know anything about the Memorial Library, except that like you I have suspected the character of the institution, largely on account of the form in which the requests for publications have been preferred. We have sent them nothing and intend to send them nothing, unless we get better evidence of their need for our literature than we have received up to the present time.

CONNECTICUT GENERAL ASSEMBLY 1818-1918

That was a remarkable gathering which met on Capitol Hill Wednesday, May 7, 1919. In response to an invitation from the General Assembly, extended through a Special Legislative Committee, consisting of three Senators and eight Representatives, working through William Harrison Taylor, "Souvenir Taylor," as its Secretary, those who had served the State as State Officers or members of the General Assembly, or officers thereof, came together to celebrate the One Hundredth Anniversary of the first meeting of the Connecticut General Assembly under our present Constitution.

By special arrangements, Governor Marcus H. Holcomb welcomed the Ex-Governors in the Executive Chamber; Lieutenant-Governor Wilson welcomed the Lieutenant-Governors in his room; Secretary of State Perry, Treasurer Gilpatric, Comptroller Webster, and Attorney-General Healy, each welcomed their predecessors in their respective offices. In like manner the members of the Senate of 1919 welcomed their predecessors by Districts, while the members of the House of 1919 received their predecessors by Counties.

While the day was far from a pleasant one, those invited began to arrive early, and it was not long before the Capitol, brilliantly lighted for the occasion, was resounding with the merry laugh and hearty greetings of those who came from all parts of the State and were meeting those whom perhaps they had not met for many years. The brilliant lights, the hearty hand shakes, the cordial greetings, the united singing, the generous lunch, and the numerous signs of greetings and directions, characteristic of Secretary Taylor, all contributed towards making the day a success socially. The program which had been arranged for the occasion and which had to be presented in the Representatives Hall, rather than on the Capitol grounds as planned, was appreciated.

At the State Library a special exhibit was made of all those items relating to the development of the Connecticut Constitution. In the exhibit were shown the old charter and the Constitution of 1818, both housed in an artistic fire-proof vault just under Stuart's portrait of Washington in Memorial Hall. In adjoining cases was a collection of the several revisions of Connecticut Law from the first one, together with the original manuscript journal of the Constitutional Convention of 1818. The mural decoration by Albert Herter of New York, which occupies the panel back of the Judges' Bench in the Supreme Court Room, commemorates the assembling of the citizens of Windsor, Hartford and Wethersfield at the moment they are about to adjourn, having completed the formulating of "THE ELEVEN FUNDAMENTAL ORDERS" now recognized to be the first written constitution in the modern sense. Thomas Hooker, occupying the central part of the scene, is shown in the act of making his famous declaration, "In matters of greater consequence which

concern the common good a General Council chosen by all to transact businesses which concern all I conceive under favor most suitable to rule and most safe for relief of the whole." This great declaration has been fittingly inscribed on a tablet inserted in the center of the tile floor in Memorial Hall at the State Library, which tile also shows the evolution of the seals of Connecticut.

Probably for the first time the contents of the Connecticut Constitution Tablet, erected on the northwest wall, near the battle flags, by the Daughters of the American Revolution, came to be appreciated. This epitome of Connecticut's unique place in modern political history was for use at the Connecticut State Building at the Louisiana Purchase Exposition at St. Louis, 1904, by Mrs. John M. Holcombe of Hartford, a member of the National Board of Lady Managers. The frame which was executed by Albert Entress of Hartford, except the inside moulding, which was made from an oaken beam taken from the most ancient of the Gold Street houses bordering the ancient cemetery in which the settlers of Hartford are buried, is of charter oak contributed by Mrs. Samuel Colt, Miss Annie Elliott Trumbull and Mrs. Holcombe.

The four dates carved upon this frame, namely, 1639, the Constitution born in Connecticut; 1662, charter secured by John Winthrop and an infant republic protected; 1687, charter hidden in the oak and the Republic preserved; 1789, adoption of the United States Constitution on Connecticut Model, are pivotal dates in the history of Connecticut, whose position in political history is unique, as evidenced by the following quotations from leading historians, all of which have been so beautifully illuminated by Mr. Charles L. N. Camp of New Haven upon this our Connecticut Constitution Tablet:

CONNECTICUT, THE CONSTITUTION STATE

"The eleven fundamental orders of Connecticut, with their preamble, present the first example in history of a written constitution."

Green: "Short History of the English People."

"The birthplace of American democracy is Hartford! Government of the people, by the people, and for the people first took shape in Connecticut. The American form of commonwealth originated in Connecticut and not in Massachusetts, Virginia, or any other colony. The

Connecticut Constitution of 1639 was the first written constitution in the history of nations." Alexander Johnston.

"It was the first written constitution known to history, that created a government." John Fiske.

"Alone of the thirteen colonies, Connecticut entered into the War of the Revolution with her governor and council at her head under the constitution of her Royal Charter." Leonard Woolsey Bacon.

"It is on the banks of the Connecticut, under the mighty preaching of Thomas Hooker, and in the constitution to which he gave life, if not form, that we draw the first breath of that atmosphere which is now so familiar to us."

Johnston: "Connecticut" (American Commonwealth.)

"Thomas Hooker, the man who first made possible our American democracy." Elliott: "History of New England."

"The Connecticut Constitution of 1639 is the foundation of the republican institutions of the colony and state. It may claim on higher considerations the attention of students of politics, science, and general history." J. Hammond Trumbull.

"The first constitution written out as a complete frame of civil order in the new world embodies all the essential features of the constitutions of our states, and of the republic itself as they exist at the present day." Horace Bushnell.

Those who were permitted to witness and join in these anniversary exercises commemorating our first one hundred years under our present constitution, were impressed with the great work which had been accomplished by those citizens of Connecticut who have "gone on before" and with responsibilities which rest upon those now living to see to it that those liberties, those opportunities, and those responsibilities which are ours shall be handed on inviolate, to those who shall assume the conduct of affairs in the days to come. All returned to their homes understanding as never before the real meanings of those declarations made upon the Connecticut Constitution Tablet now keeping company with those sacred flags which represent another side and another victory in the life of Connecticut.

The Proceedings of the Connecticut General Assembly Centenary, 1919, have been printed by the State of Connecticut in an attractive volume of 188 pages with illustrations and index.

WHO USES OUR STATE LIBRARY?

The following, which is a partial list of letters which came to the desk of the State Librarian in the first two mails of Thursday, January 20th, may serve as a sort of index to the scope of the activities of our State Library and the field from which inquiries come:

1. Request from a New Haven Senator to furnish photostat copies of all bills introduced in the Legislature to the New Haven County Bar Library.
2. Request from a senator for photostat copies of special bills for immediate use.
3. Inquiry from Automobile Legal Association concerning copies of bills.
4. From the Librarian of the State University of Michigan requesting information concerning, and assistance in completing its file of congressional publications.
5. From a New York importer and dealer in books and periodicals concerning Brunet's Library Manual.
6. From the Corporation Trust Co., New York, advising that it was sending complimentary certain pamphlets for our Legislative Reference Department.
7. From Czecho-Slovak Committee relating to certain publications connected with that republic.
8. From the order of the Maccabees, Detroit, presenting a copy of the "History of the Maccabees in the World War."
9. From Lieutenant-Colonel W. S. Solomon, Providence, a history and Roster of the Masonic Club of the Third American Army and Rhode Island Overseas Lodge at Coblenz, Germany, 1919.
10. From C. H. Crandall, Stamford, Connecticut, a copy of his Patriotic Poems and War Songs dedicated to his four sons in the service and other Stamford boys who helped fight for world freedom, published in Stamford.
11. From the Legislative Reference Librarian of North Carolina, transmitting various compilations of North Carolina laws.
12. From the President of the Connecticut Editorial Association, inviting the State Librarian to its Annual Meeting and Banquet January 22d.
13. From the Post Publishing Co., Bridgeport; the Public Library at Seattle, Wash.; and residents of Waterbury and Watertown requesting bulletins of the Conn. Geological and Natural History Survey.
14. From the Law Reporting Co. of New York transmitting the Proceedings of the 1919 Annual Convention of the National Association of Railroad and Utilities Commissioners.
15. From the American Numismatic Society, New York, relating to the Mitchelson Collection of coins and medals and the publication of the "Numismatist."

16. From the Department of Agriculture, relating to Monthly Climatological Data.
17. From the Michigan State University General Library relating to Michigan state publications.
18. From the Librarian of Trinity College relating to various official publications.
19. From the State Street Trust Co., Boston, requesting certain information relating to memorials exchanged between New England towns with towns of the same name in the mother country.
20. From the Connecticut College for Women relating to list of books treating with Greek Immigration.
21. From the Town Clerk of Wethersfield, calling attention to the worn condition of the early volumes of land records in the office of the Wethersfield Town Clerk, and suggesting that legal provision be made whereby such early volumes could be permanently deposited in the State Library and a photostat copy, duly certified, be furnished the Town Clerk to be used in his office, thus insuring the safety and accessibility of the original records and making more easily accessible the contents of the volumes through the certified photostat copies.
22. From a New York publisher transmitting the balance of the Series of Peace Handbooks published by His Majesty's Stationery Office, London.
23. From a New York publisher calling attention to a 1921 edition of Latin American Commercial Law and a new edition of Bender's Manual for Supervisors and Town Clerks.
24. From the Asia Publishing Co. calling attention to the delay in publishing the title-page and index to Volume 20 of that periodical.
25. From Brown Brothers of New York requesting information relating to, and a photograph of the Brownell painting of the Charter Oak in our State Library, and a list of other paintings of historical objects and events suitable to illustrate a new history of the several states.
26. From a Philadelphia publisher calling attention to the completion of a History of the Great War.
27. From New York concerning the importation of certain books relating to Connecticut's part in the ter-centenary movement.
28. From a former Governor of the Mayflower Society of Connecticut; from a member of the General Assembly of the State of Wyoming; from citizens of Van Buren, Mo.; Bell Plains, Iowa; and Truemanberg, N. Y.; asking for information relating to their ancestors, all of whom were early inhabitants in Connecticut.
29. From the Library of Congress asking for certain Connecticut official publications.
30. From a manufacturer returning a duplicate special report from our Legislative Reference Library.
31. From a Connecticut Compensation Commissioner acknowledging the receipt of certain official state publications needed.
32. Acknowledgment from the British Museum, London, of the receipt of certain state official publications.

SOME QUESTIONS ASKED

The following letters will serve to show the extent of some inquiries and the anticipated valuation placed upon the services necessary to furnish such information:

Dear Sir:

I wish to know if Blank, born in Haddam, Connecticut, 1679, and died there in 1743, ever served as a Captain in the Colonial Troops and if he did under what commanding officer and in what organization and when. I also want to know if he served in the General Court from 1731 to 1735, inclusive, and again in 1739.

If these facts appear in the record, I wish to secure a true copy to show the information outlined above, and duly sworn to by Notary or other qualified official as to the correctness of the copy. I enclose my check for \$1.00 to defray expenses.

Very truly yours,

AN APPRECIATION

The following letter from an author of international reputation is pleasing to the State Librarian and his assistants:

63 Tremont Street,
HARTFORD, CONNECTICUT, U. S. A.
February 21st, 1919.

TO SENATOR MEADE,
Chairman, Appropriations Committee,
The Capitol, Hartford, Conn.

Dear Sir:

Twice within the last few years in prefaces to books on history or on political science that I have written, I have paid tribute to the value of the Connecticut State Library—to its magnificent collection of material for the study of political and economic history, political science and diplomatic history, and also to the excellence of the organization perfected by Mr. Godard, and the resulting ease with which research can be undertaken at the Library.

I am glad of this opportunity of paying a similar tribute to the Library, to Mr. Godard and to the staff, before the Committee on Appropriations. Several times since I put on public record my tributes to the Library, I have been asked (usually by librarians in other cities) whether I meant all I said, or whether I was merely paying a compliment to the Library of my home city. Invariably my answer was that I had not in the least over-estimated the value or the range of the collection of books in the State Library, nor said a word concerning the organization and efficiency of the Library which I could not abundantly make good if my questioner would visit Hartford.

It so happens from the character of my work for the last twenty-five years that I am familiar with the leading libraries in the United States, with most of the great libraries in England, and with all the legislative libraries in the Dominion of Canada. I have, of course, worked in libraries that are larger than our State Library, but I am familiar with none on either side of the Atlantic in which the organization is superior to that of the State Library or where it is easier for a man to obtain quickly the books he is needing.

Yours sincerely,
EDWARD PORRITT.

STATE LIBRARY BULLETINS AND PUBLICATIONS

In addition to the regular reports of the State Librarian, which have been published from time to time, there have been published several bulletins as follows:

No. 1. List of Law Reports, Digests and Statutes in the Connecticut State Library, December 20, 1904. 31 pages, Hartford, 1905. (This also appeared as Appendix I in the report of the State Librarian for September 30, 1904.)

No. 2. Author and Subject Index of the several Dictionaries, Encyclopedias, Legal Treatises and Legal Periodicals Accessible in the Connecticut State Library October 1, 1903. 87 pages, Hartford, 1905. (This also appeared as Appendix II in the Report of the State Librarian for September 30, 1904.)

No. 3. Connecticut Town and Municipal publications, December 1, 1908. 11 pages, Hartford, 1909. (This also appeared in the Report of the State Librarian for September 30, 1908.)

No. 4. General Description of the New State Library and Supreme Court Building. 18 pages, Hartford, 1909. (This also appeared in the Report of the State Librarian for September 30, 1908.)

No. 5. List of References to Material in the Connecticut State Library upon Employers' Liability and Workmen's Compensation, Legislative Reference No. 1. 27 pages, Hartford, 1913.

No. 6. Progress of Work Upon the Public Records and Archives, and Early Connecticut Houses, Colonial Dame Series. 16 pages, Hartford, 1914. (This also appeared in the Report of the State Librarian for September 30, 1914.)

No. 7. Connecticut Houses. A List of Manuscript Histories of Early Connecticut Homes, presented to the Connecticut State Library by the Connecticut Society Colonial Dames of America, compiled by Mrs. Elford Parry Trowbridge, Chairman Committee on Old Houses. 33 pages, Hartford, April, 1916.

No. 8. Instructions for Care of Archives in the Connecticut State Library by Effie M. Prickett, Chief Archives Department. 16 pages, Hartford, 1920. (This also appeared in the Report of the State Librarian for September 30, 1916.)

No. 9. Select List of Manuscripts in the Connecticut State Library. (This also appeared in the Report of the State Librarian for September 30, 1916.)

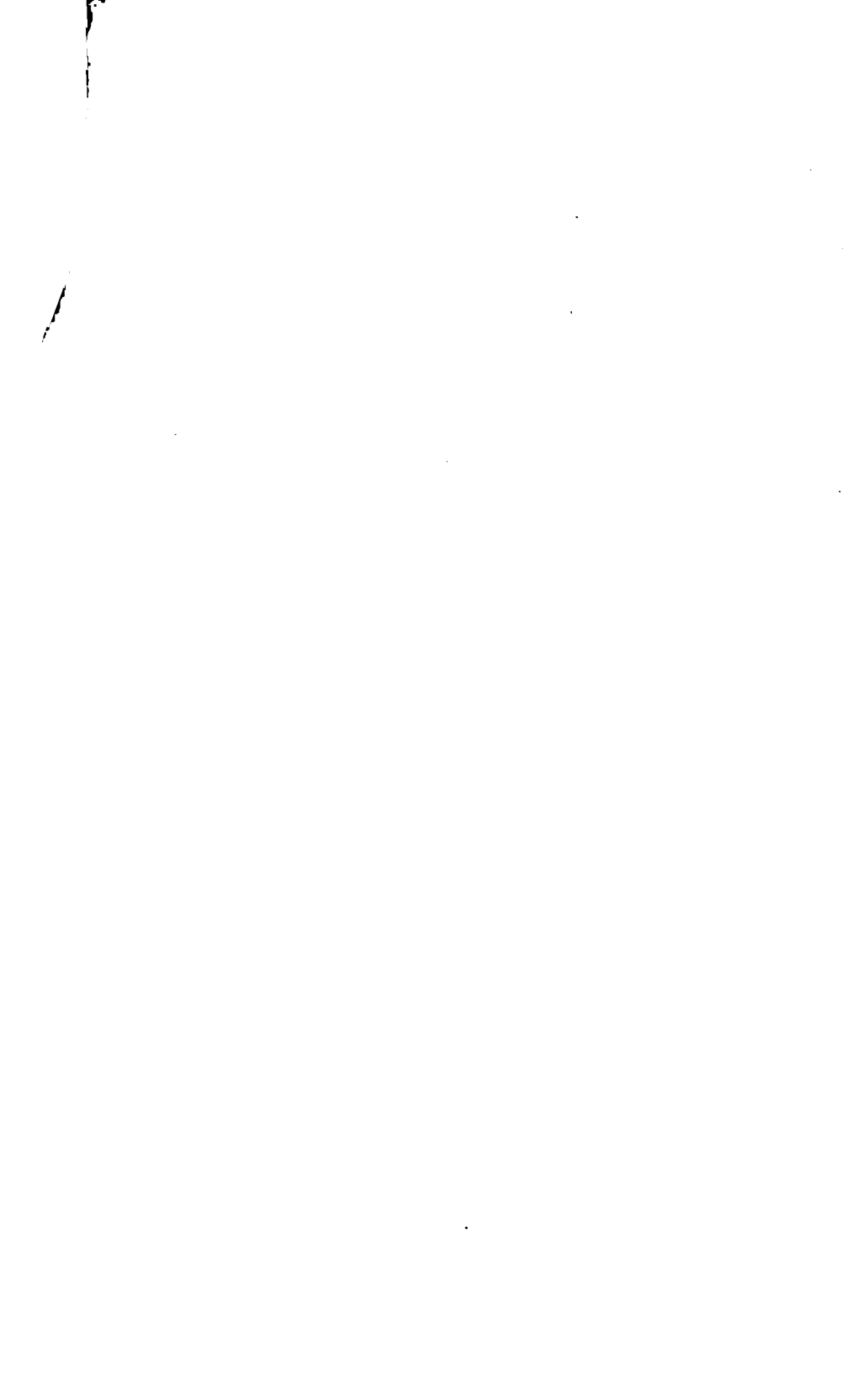
MISCELLANEOUS.

No. 1. Laying of the Corner Stone of the Connecticut State Library and Supreme Court Building at Hartford, May 25, 1909, containing addresses by Hon. Morgan G. Bulkeley, President of the Commission, and Simeon E. Baldwin, Chief Justice of Connecticut, together with complete proceedings and contents of articles deposited in the corner stone. 39 pages, Hartford, 1909.

No. 2. Report of the State Military Census on the Nurses and Nursing Resources, February 15, 1918. 15 pages, Hartford, 1918.

No. 3. Connecticut State Library, Hartford. A Brief Summary of its Activities. 8 pages, Hartford, 1915.

No. 4. Connecticut State Library, Hartford. A Brief Summary of its Activities. Second Edition. 8 pages, Hartford, 1916.





CONNECTICUT STATE LIBRARY, HARTFORD.

George S. Godard, *Librarian*.
 Memorial Hall, looking south from balcony, showing Governors' Portraits, Stuart's Portrait
 of Washington, Special exhibit illustrating the Adopting Charter and Constitution,
 Military Order of Foreign Wars, Historical Collection, and the Beineard
 Collection of War Posters.

BRAINARD COLLECTION OF WAR POSTERS

An elaborate and interesting collection of war posters of historical value was placed on exhibition in Memorial Hall at the State Library. Practically all the allied nations engaged in the late war are represented in the extensive collection. There are more than 600 posters in all. About 200 of these have already been placed on exhibition, the posters being mounted on three long rows of frames which extend nearly the entire length of the hall. Others will be mounted shortly and arrangements are now being made to provide room for them.

The posters exhibited were presented to the Department of War Records in the State Library by Newton C. Brainard of Hartford. The countries represented include Great Britain, France, Belgium, Serbia, Italy and the United States. The Canadian collection in particular is remarkably complete and the posters from other nations are creditably so. Various government loan appeals as well as posters urging enlistment in the fighting forces are included in the set. Many of them are of very fine design having been drawn by artists of international reputation. Most of the posters were made familiar to the peoples in the various fighting nations during the war, but the greatest part of the exhibition is entirely new to most people in this county and the striking illustrations hold considerable interest for all who viewed them. In order to better preserve them the posters will be backed with cloth. Frank M. Gregg of Cleveland, Ohio, who delivered an address on War Posters before the Connecticut Historical Society, congratulated the state on having secured the collection. This collection supplements the large number of posters secured by the State Library during the past three years.

A view of this exhibit in Memorial Hall, with the other historic portraits and exhibits is shown in the accompanying cut.

WAR EXHIBIT

Only a casual visit to the State Library is necessary to show the interest taken in these exhibits by the various visitors, including large numbers of school children who come from all parts of the State.

Every one is anxious to learn what his folks or the soldiers from his district did in this or that campaign, and while every

town did not have a General Washington or a General Putnam as a son and patron saint, they did have sons and daughters who were called from the plow and from the home into the service of their country, and they did that service just as willingly and just as well, thus contributing their part to the safety and development of their country and the general advancement of the world.

Among the most interesting exhibits are the special decorations, some gold, some silver, some bronze, conferred by different countries and by different bodies. Of these perhaps the most conspicuous and ornate are those which had been prepared by the Kaiser to have been conferred upon his generals when they entered Paris, and other decorations of lesser degree which he had intended to have conferred upon officers and men of lesser grade.

The service medals provided for by Congress, and issued through the War Department and Navy Department are especially impressive. In the War Department medals, in addition to the Civil War Medals, we find those covering the Cuban Pacification Medal, the Spanish Campaign Medal, the Spanish War Service Medal, the Philippine Occupation Medal, the Cuban Occupation Medal, the Porto Rican Occupation Medal, the Mexican Border Medal, the Philippine Campaign Medal, the Indian Campaign Medal, the Mexican Service Medal, the China Relief Expedition Medal, the Certificate of Merit Badge, and the Congressional Medal of Honor.

In the Navy and Marine Corps Medals there are the Civil War Medal, Mexican Campaign Medal, Nicaraguan Campaign Medal, Haitian Campaign Medal, Spanish American War Medal, Philippine Campaign Medal, China Relief Expedition Medal, Cuban Pacification Medal, United States Medal for Naval Engagements in the West Indies, 1898, United States Marine Corps Good Conduct Badge, the Manila Bay Medal, and the Congressional Medal of Honor.

Of the medals conferred in connection with the late war there is a Distinguished Service Cross, the Distinguished Service Medal for the Army, the Distinguished Medal for the Navy, the Congressional Medal of Honor, for the Army and for the Navy, and two Victory Medals, on the ribbon of one of which are fourteen bars designating the fourteen major engagements in which

the troops of the United States soldiers participated, and on the ribbon of the other, showing the reverse, five bars designating the five countries in which the United States soldiers fought.

One of the most conspicuous trays is that containing the five decorations issued by the Cuban National Red Cross, which were received through the Cuban Legation in Washington.

Among the foreign decorations exhibited are the Belgian Legion of Honor Medal, the French Legion of Honor Medal, (regulation and miniature) French Military Medal, (regulation size and miniature) French Croix de Guerre, with bronze star, silver star, and palm.

Among the medals shown is the Cardinal Mercier medal struck at the Belgian Mint, a series of French bronze medals struck at the French mint, a series of bronze and silver medals struck in the United States commemorating various events in connection with the World War.

Conspicuous among the foreign medals, and perhaps the most gruesome part of the collection of medals is that consisting of fourteen German Iron Medals bearing figures emblematic of various phases of war and European politics from the German point of view. Of the trays of decorations and medals perhaps none are more interesting than those containing the service medals conferred by the various Connecticut towns upon their sons in the service.

OUR OWN BINDERY

The problem of binding and re-binding, in a large library, is no small one. The establishment, therefore, of a bindery in our State Library, and the employment of Mr. A. L. Klunker of New Britain, who has been doing the larger share of binding work for the Library since 1900, has been a fortunate one.

LIBRARY BUILDING AND GROUNDS

As much of the work in the several lines of activity covered by our State Library has been made possible because of our new State Library and Supreme Court Building, I cannot bring this report to a close without mentioning the splendid provisions made for all departments of our State Library work.

In this new building provision was made not only for open

shelving in the main room for the law library and general works of reference, and for commodious stack rooms near at hand to accommodate all books not otherwise provided for, but also a series of vaults conveniently located, with special fittings to protect and make conveniently accessible our archives, records, and special collections; a series of study and dictation rooms conveniently at hand for those who need them; and last but not least, for a dignified Memorial Hall for the proper hanging of portraits of our several governors, the display of historical items, and a convenient and commodious meeting place for dignified gatherings.

Through the favor of the Park Department of Hartford, through its Superintendent, George A. Parker, our beautiful grounds have been further beautified by a formal foliage bed in our sunken garden at the east end of the building, facing Washington Street.

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State of Connecticut
PUBLIC DOCUMENT No. 41

BIENNIAL REPORT
OF THE
EXAMINER OF PUBLIC RECORDS

For the Period Ended June 30, 1920



PRINTED IN ACCORDANCE WITH THE STATUTE

HARTFORD
PUBLISHED BY THE STATE
1920

PUBLICATION
APPROVED BY
THE BOARD OF CONTROL

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CONNECTICUT STATE LIBRARY

Hartford, November 28, 1920.

To His Excellency:

MARCUS H. HOLCOMB, Governor.

Sir: I have the honor to submit herewith the fifth report of the Examiner of Public Records made to the State Librarian under the provisions of Chapter 58 of the Public Acts of 1911, which act made the supervision of the public records of our State a part of the work of the State Librarian.

In his first report Mr. Barbour, who entered upon his duties as Examiner of Public Records July 5, 1911, confined his attention to the condition of records, vaults and safes in the offices of the several town clerks and judges of probate throughout the State, based upon personal observation during the fifteen months preceding September 30, 1912, during which time he personally visited and inspected each of these offices.

In his second report for the two years ended September 30, 1914, he confined his attention more especially to the erection of new vaults; the purchase of new safes; the installation of metal equipments; the restoration, repairing, binding, copying and publication of records; the depositing in the State Library of official papers not in current use; and the testing of inks and typewriter ribbons, as directed by the General Assembly of 1913.

In his third report for the two years ended September 30, 1916, in addition to the usual items, he has, as required by the General Assembly of 1915, reported upon the progress being made in compiling general indexes to the land records in the several towns, and specified standard papers for use in the public records of the State. The revised annotated list of Connecticut towns and probate districts which are printed as appendices to the report will be found of service.

In the following report as in his report for the two years ended September 30, 1918, in addition to the usual items, the Examiner has devoted most of his attention to the subject of Loose Leaf Binders and to the General Index to Land Records as provided for in Chapter 67 of the Public Acts of 1917.

It is a pleasure to note the continued interest in public records and the general desire not only to make these records permanent and easily accessible but to house them in places where they will be safe.

I concur in the several recommendations made by the Examiner of Public Records.

Respectfully submitted,

Geor. Godard

State Librarian.

HARTFORD, June 30, 1920.

To

George S. Godard, State Librarian,
State Library, Hartford, Connecticut.

Complying with the provisions of Section 1084, General Statutes, Revision of 1918, I herewith hand you my fifth biennial report as Examiner of Public Records for the period ending with the fiscal year on June 30th, 1920, it being the eleventh report on Public Records for the State of Connecticut.

INSPECTIONS.

Inspections have been made in the following towns since October 1, 1918. The number of towns visited is eighty-one and in several cases more than one visit has been made to towns where conditions showed it advisable.

Ansonia	East Haven	Morris
Barkhamsted	East Windsor	New Britain
Bloomfield	Ellington	New Canaan
Branford	Enfield	New Hartford
Bristol	Essex	Norfolk
Burlington	Fairfield	North Branford
Canaan	Farmington	North Canaan
Canton	Goshen	Norwalk
Cheshire	Granby	Orange
Chester	Greenwich	Plainville
Clinton	Guilford	Plymouth
Colchester	Haddam	Salem
Colebrook	Hartford	Salisbury
Cornwall	Hartland	Saybrook
Cromwell	Harwinton	Seymour
Darien	Killingworth	Shelton
Derby	Litchfield	Somers
Durham	Lyme	Southington
Easton	Madison	South Windsor
East Granby	Marlborough	Stafford
East Haddam	Middletown	Stamford
East Hampton	Milford	Stratford

Suffield	Waterbury	Willington
Thomaston	Westbrook	Wilton
Tolland	West Hartford	Winchester
Torrington	Weston	Windsor Locks
Vernon	Westport	Woodbridge

DOCUMENTS DEPOSITED IN STATE LIBRARY.

The following deposits of record material have been made since the date of the last report under the authority granted in Section 1086 of Revised Statutes:

On November 18, 1918, and December 19, 1918, the Probate Files of the District of Plainfield;

On November 21, 1918, and September 24, 1919, the Probate Files of the District of Canton (additional);

On September 24, 1919, the Probate Files of the District of Norfolk;

On October 9, 1919, the original map showing the ancient boundaries of the town of Kent;

On November 8, 1919, the Superior Court Files of the County of Tolland.

OTHER DEPOSITS.

During the past fifteen years the Examiner of Public Records, at his own expense, has caused copies to be made of the vital records prior to 1850 of the several towns in the State, and these copies, as rapidly as they can be indexed, have been placed in the State Library for the use of those who are interested. The vital records of the several towns in New London County have been indexed and the records of each alphabetically arranged and listed. Each original entry was transcribed on a small card and these cards were arranged alphabetically for each town and listed. The cards for all the towns of this county have been assembled in one index, which makes an alphabetically arranged card index of the vital records for the whole county. Work is now being done in preparing the records of the several towns of Windham County in the same manner.

NEW EQUIPMENT.

There has been reported to this office new vault equipment in the Probate Offices of New Haven and Norwalk and in the town vaults of Cromwell, Haddam, New Milford and Saybrook. New safe equipment has been installed in the offices of the Town Clerks of Durham, Old Saybrook, Somers, Stafford and Volun-town.

REPAIRS OF VOLUMES.

Repairs to volumes and maps have been made in the fol-lowing towns:

Colebrook	Middlefield	Somers
East Windsor	New Haven	Stafford
Hartland		

PAPERS, INKS AND RIBBONS.

Even in view of the many times recording officials have been advised and warned about the use of proper paper, ink and typewriter ribbons there have been some cases of negligence in following out these instructions. This is chiefly true regarding the use of authorized ink, and every effort is being made at the present time to see to it that proper materials are being used in all offices.

The authorized list of materials is herewith repeated from former reports for reference:

<i>Name of Paper</i>	<i>Manufacturer</i>
Brown's Linen Ledger	L. L. Brown Paper Co., Adams, Mass.
Byron Weston Company's Linen Ledger	Byron Weston Co., Dalton, Mass.
Parsons' Scotch Linen Ledger	Parsons' Paper Co., Holyoke, Mass.
Whiting's Linen Ledger	Whiting Paper Co., Lafayette & Howard Sts., New York City.

<i>Name of Ink</i>	<i>Manufacturer</i>
Carter's Record Ink	The Carter Ink Co., Boston, Mass.
Carter's Combined Writing and Copying Ink	The Carter Ink Co., Boston, Mass.
Davids' Combined Writing and Copying Ink	Thaddeus Davids Co., 127 William St., New York City.
Stafford's Special Writing and Copying Ink	S. S. Stafford, Inc., 603 Washington St., New York City.

<i>Name of Ribbon</i>	<i>Manufacturer</i>
American Brand Typewriter Ribbon	H. M. Storms Co., New York City.
Blue Ribbon Brand Typewriter Ribbon	New England Carbon Mfg. Co., Boston, Mass.
Carnation Typewriter Ribbon	Miller-Bryant-Pierce Co., Aurora, Ill.
Carter's Director Typewriter Ribbon	The Carter Ink Co., Boston, Mass.
Carter's Ideal Typewriter Ribbon	The Carter Ink Co., Boston, Mass.
Charter Oak Brand Typewriter Ribbon	Plimpton Mfg. Co., Hartford, Conn.
Columbia "Silk Gauze" Typewriter Ribbon	Columbia Ribbon & Carbon Mfg. Co., New York City.
Commercial Brand Typewriter Ribbon	New England Carbon Mfg. Co., Boston, Mass.
Criterion Typewriter Ribbon	M. F. Donovan Co., Auburn, N. Y.
Crown Brand Typewriter Ribbon	Crown Ribbon & Carbon Mfg. Co., Rochester, N. Y.
De Fi Typewriter Ribbon	De Fi Mfg. Co., New York City.
Du-Ra-Bul Typewriter Ribbon	Republic-Dodge-Mfg. Co., Brooklyn, N. Y.
Elk Brand Typewriter Ribbon	Miller-Bryant-Pierce Co., Aurora, Ill.
"Eureka" Ribbon	Mittag & Volger, Park Ridge, N. J.
Kee Lox Typewriter Ribbon	Kee Lox Mfg. Co., New York City.
Non-Filling Typewriter Ribbon	Ault & Wiborg Co., Cincinnati, Ohio.

<i>Name of Ribbon</i>	<i>Manufacturer</i>
Ohashi's Commercial Brand Type-writer Ribbon	H. Ohashi & Co., New York City.
Ohashi's Standard Brand Type-writer Ribbon	H. Ohashi & Co., New York City.
Panama Typewriter Ribbon	Manifold Supplies Co. Brooklyn N. Y.
Rainbow Non-Filling Typewriter Ribbon	Columbia Ribbon & Carbon Mfg. Co., New York City.
Regal "Remtico" Brand Ribbon	Remington Typewriter Co., New York City.
"Remtico" Paragon Ribbon	Remington Typewriter Co., New York City.
"Tagger" Typewriter Ribbon	Mittag & Volger, Park Ridge, N. J.
Underwood Typewriter Ribbon	Underwood Co., New York City.
Webster Star Brand Typewriter Ribbon	F. S. Webster & Co., Boston, Mass.

LOOSE LEAF BINDERS.

On August 4th, 1919, twenty-two manufacturers were requested by this office to submit samples of their product for examination as to their suitability for use for the public records of this State. Replies or catalogs were received from seventeen and samples submitted by nine. A careful examination of these binders revealed that the products under the trade names herewith, of the following four manufacturers are permitted for use:

<i>Trade Name</i>	<i>Manufacturer</i>
Hall & McChesney (Round Post) (H & M)	Hall & McChesney, Syracuse, N. Y.
McMillan Record Book (Square Post)	McMillan Book Company Syracuse, N. Y.
Safety or Coverlock Flat Opening Typewriter Record (Flexible Post)	Stationers Loose Leaf Co., 346 Broadway, Milwaukee, Wis.
Standard Loose Leaf Binding Devices (Tubular Post)	Boorum & Pease Company, Hudson Ave. & Front St., Brooklyn, N. Y.

In the selection of these binders simplicity of construction and economy of space occupied by mechanism, as well as strength and lasting qualities, have been taken into consideration. The feature of the permanent lock on any binder has been disregarded for reasons set forth under recommendations below. It has been a difficult matter to limit the binders authorized to be used to the above on account of the excellence of the product of many of the manufacturers whose goods do not appear on the above list. There appears to be no choice among the four recommended above and the final selection may remain with the purchaser.

GENERAL INDEX OF LAND RECORDS.

The General Index of Land Records as authorized and ordered by Section 299 of the Revised Statutes has been completed in the following towns:

Andover	East Hartford	Middlebury
Barkhamsted	East Haven	Middlefield
Beacon Falls	East Lyme	Middletown
Bethany	Ellington	Milford
Bridgeport	Enfield	Morris
Bristol	Fairfield	Naugatuck
Brookfield	Greenwich	New Britain
Brooklyn	Griswold	New Canaan
Canton	Groton	New Hartford
Clinton	Guilford	New Haven
Colebrook	Hamden	New London
Cornwall	Hampton	Norfolk
Coventry	Hartford	North Branford
Cromwell	Hartland	North Canaan
Danbury	Harwinton	North Stonington
Darien	Killingly	Norwalk
Derby	Killingworth	Norwich
Eastford	Litchfield	Old Lyme
Easton	Madison	Old Saybrook
East Granby	Manchester	Orange
East Haddam	Marlborough	Plainfield
East Hampton	Meriden	Plainville

Plymouth	Shelton	Torrington
Portland	Sherman	Trumbull
Preston	Simsbury	Vernon
Prospect	Somers	Voluntown
Putnam	Southington	Washington
Ridgefield	South Windsor	Westbrook
Rocky Hill	Stafford	West Hartford
Roxbury	Stamford	Weston
Salisbury	Sterling	Wilton
Saybrook	Suffield	Winchester
Scotland	Thomaston	Windham
Seymour	Thompson	Windsor
Sharon	Tolland	Wolcott

The indexes in the towns in the following list appear to be more than 90 per cent. completed and will be finished prior to the first of October, 1920:

Ansonia	Chester	Wallingford
Bethel	Essex	*Waterbury
Bozrah	Goshen	Watertown
Bridgewater	Lisbon	Windsor Locks
Canterbury	New Fairfield	Woodbridge
Chaplin	Sprague	Woodstock
Cheshire		

The following list shows the towns having more than 75 but less than 90 per cent. of the index complete:

Berlin	Hebron	Warren
Bloomfield	Mansfield	Willington
Branford	North Haven	Woodbury
Durham	*Stratford	

These towns report the index more than half done:

Bethlehem	*Farmington	New Milford
Burlington	Franklin	Newington
Colchester	Granby	Waterford
Columbia	Monroe	Westport

Less than 50 per cent. of the work on the index has been done in the following towns:

Ashford	Kent	Oxford
Avon	Lebanon	Pomfret
Bolton	Ledyard	Southbury
Canaan	Lyme	Stonington
East Windsor	Montville	Union
*Glastonbury	Newtown	Wethersfield
Haddam		

The towns of Redding and Salem report no part of the work has been undertaken.

In my report for 1918 I recommended that the time for the completion of these indexes be extended, knowing full well that it would be impossible for many of the towns to complete the work in the short time originally allowed by law. There are many towns in the State where the work of making this index has been light and easy. There are, perhaps, as many where the work has been extremely difficult for at least two reasons. First, it is difficult to find the proper person to do this work correctly and carefully, and secondly, on account of the great number of volumes in some of the smaller towns, and in many cases these towns are the ancient ones and consequently the number of volumes to be indexed is very great. The statute, as originally drafted, demanded in some cases the impossible, and rather than do this work in any way but the best and correct way, I have recommended in some cases that the work be postponed until the proper person could be found to do it. Cases where there has been negligence in complying with the statute have been very few.

The following extract taken from a letter from one who is doing this work and is confronted with difficulties expresses not only his views but those of very many other compilers:

"Owing to the scarcity of farm labor I have been obliged for the past two years to operate my farm with practically no assistance with the result that although my outdoor work was much slighted, I still could get but little opportunity to devote to the index. I now

* The earliest records have not been included in the General Index.

have a capable man and after the haying season expect to be able to devote a considerable part of my time to this work.

I was very reluctant to undertake this matter but there was no one else locally who was at all familiar with this line of work and with the study of old and difficult handwriting, while, to get an outsider to do it with present charges for board and transportation, would have made heavy expense for the town, and our then Selectmen almost insisted that I take charge of the task. I was further influenced by the fact that should I continue in office for any considerable time longer, the vast amount of information which I would glean would be of great value to those who come to the office in search of genealogical and historical data. As at the rate I am doing the work * * * * I cannot earn as much as I pay unskilled labor, the only selfish reason which influenced me was that it is a nuisance to my wife to be obliged to have to be tied up week after week by some one from outside working on the records, as would be the case if a stranger did the work. * * * *

Had I known just how matters would have been I should not have attempted the job, but having done the most difficult part and become interested in the work, I should like to complete it if possible. From the recommendation in your last report I understood that time for completion was virtually extended until July 1, 1920, but of course I should hold myself personally responsible for any fine that might thereafter be assessed upon the Selectmen.

However, if you think proper to instruct the Selectmen to appoint some one else to complete the index there will be no excuse for me to feel that I have not been fairly treated."

The above puts in words expressly what very many compilers in other towns have expressed and fairly shows the general self-sacrificing willingness to do the work and at the same time the handicap and obstacles encountered in the endeavor to complete it.

RECOMMENDATIONS.

During the past two years, due to the disturbance of all manufacturing conditions, it has been impossible for many manufacturers to obtain materials of the same quality and grade as in the past, and I am inclined to the belief that the quality of inks and ribbons may have deteriorated or changed. Certainly many new products of manufacture have appeared on the market and their value should be determined. Therefore, I recommend that an exhaustive test of inks and typewriter ribbons similar to the one authorized in 1913 be made and the present list of approved inks and ribbons be revised, if necessary, to conform to the results of this test.

As shown above, four different types of loose leaf record books have been approved for use in the recording offices and approval has been given these more or less under protest, but

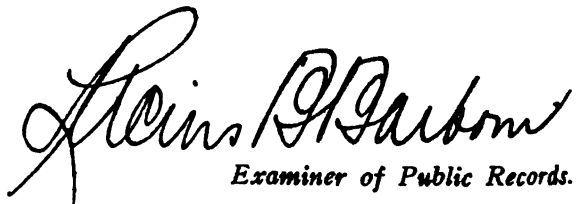
the demand for record volumes of this kind has been so persistent and the advisability of their use in certain cases so apparent that objection has been withdrawn with the belief in mind that a satisfactory, uniform method of a permanent binding can be devised which will make these volumes as sound as a full sewn book. Each of the manufacturers of the binders approved has his own methods for permanently locking and safe-guarding the record but none of these methods has the approval of the Examiner. I, therefore, recommend that a committee of not less than five, consisting of the Examiner of Public Records and a representative, preferably the designer, of each of these manufacturing companies if possible, be authorized to devise and adopt a suitable plan for the permanent binding of loose leaf records.

In view of the fact that unexpected and unforeseen difficulties have delayed the work of completing the General Index of Land Records within the time specified by statute and that the unusual condition caused thereby still exists, I recommend that leniency and patience be shown in cases where the compilers are doing faithful work and action be taken under the authority of the statute to enforce penalties only where negligence is evident.

CONCLUSION.

Every recording officer who has been visited reports an unprecedented increase in the number of instruments left for record, particularly transfers of real estate, and the increase of labor caused thereby has created a new and more lively interest in his work which has made itself evident by the improved and healthy conditions noted in practically every instance.

Respectfully submitted,



Lewis B. Dalton
Examiner of Public Records.

State of Connecticut
PUBLIC DOCUMENT No. 61

REPORT

OF

The Connecticut Public Library Committee

TO

THE GOVERNOR

For the Years 1915, 1916, 1917, 1918

PRINTED IN COMPLIANCE WITH STATUTE

HARTFORD
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1919

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PUBLIC LIBRARIES

The report of the Connecticut public library committee which follows covers the years 1915, 1916, 1917 and 1918.

The membership of the committee was changed in that period by the appointment in 1915 of George J Vogel, Torrington, to succeed Edwin B Gager, Derby.

In 1915 the law providing for the appropriation was amended to provide \$4,000 annually for clerical assistance, printing, traveling and other incidental expenses of the committee.

In 1917 the law providing for the annual grant to libraries was amended to provide that libraries in towns with grand lists not exceeding \$1,250,000 might receive grants equalling the amounts annually appropriated and expended from any source for the library.

The normal activities of the committee have been interrupted, and, in some cases, suspended in order to take advantage of the opportunity to do war work.

The calls for cooperation came from many organizations, some of them outside the field of library work, as that field had been defined up to the war period.

In July, 1917, a campaign for securing gift books and magazines for the soldiers was begun. From that time to the end of the period covered by this report books have come into this office for distribution or been sent directly from the libraries in the state to dispatch offices, camps or ships.

28,085 volumes were sorted, most of them prepared for circulation, and shipped from this office. 14 volunteer workers from Hartford or nearby towns worked, with considerable regularity, to prepare the books. 62,235 volumes were sent from libraries under instructions from this office.

Libraries in the state have reported 93,794 volumes shipped to various points without instructions from this committee. These reports are undoubtedly incomplete and it is impossible to estimate correctly the total number of volumes contributed through the libraries of the state to the soldiers, sailors and marines.

In September, 1917, the chairman of this committee acted as state director of the campaign conducted by the American library association to secure \$1,000,000 to establish library service for the camps and ships. This required about six weeks of intensive and extensive activity in preparing the ground, securing a campaign director in each town, and gathering reports of the campaign.

The quota assigned by the committee of the American library association to Connecticut was \$65,000. The amount raised was \$63,774. Contributions to this fund were received from all the towns in the state except three. Two of these are towns without libraries. Details of the campaign may be found in document no 1, 1918, published by this committee.

LAW

The law which directs the activities of the committee reads

SEC 1107. The Connecticut public library committee shall give to communities advice and assistance in the organization, establishment and administration of free public libraries, and shall extend to all free public libraries aid in selecting and cataloguing books and in library management, and may for the purpose of this section visit and inspect libraries organized under the provisions of section 1109, and may suggest improvements in said libraries. Said committee is authorized to purchase and arrange books and pictures to be loaned to such public libraries, schools, associations and individuals as the committee may select.

SEC 1108. The librarian or director of any public library and the teachers of any public school may ask said committee for advice and assistance in regard to the selection, purchase and cataloguing of books, and any other matters pertaining to the maintenance or administration of the library, and the committee shall give advice and assistance in regard to said matters so far as it shall find it practicable to do so. The committee shall annually report its doings to the governor.

SEC 1109. If any town having no free public library shall establish a free public library and shall provide for the care, custody and distribution of books and for the future maintenance and increase of such library in a manner satisfactory to said library committee, said committee may expend for books to be selected by the said committee a sum not to exceed the amount expended by the said town for the establishment of such library and not to exceed two hundred dollars.

SEC 1113. In towns whose grand list exceeds one million two hundred and fifty thousand dollars, the Connecticut public library committee may expend annually for books selected by it for any free public library, a sum not to exceed the amount annually appropriated and expended by the town for the increase of such library. In towns whose grand list does not exceed one million two hundred and fifty thousand dollars, said committee may expend annually, for books selected by it for any free public library, a sum not to exceed the amount annually appropriated and expended from any source for the increase of such library, *provided*, the expenditure by said committee shall not exceed the sum of one hundred dollars annually for any library.

Summaries of the work are made under the following heads

- 1 Expenditure of the annual state grant.
- 2 Advice and assistance to libraries in selection of books and administration of libraries.
- 3 Advice and assistance to teachers in selection and purchase of books for school libraries.
- 4 Printing and distribution of documents.
- 5 Circulation of books, pictures and lectures among schools.
- 6 Circulation of books and pictures among libraries, clubs, individuals and neighborhoods.
- 7 Public meetings.

I EXPENDITURE OF THE ANNUAL STATE GRANT

ADOPTION

The following libraries, which had not before received state grants, made applications for the grants

Year	Town	Amount voted by town or city	Amount granted by state
1915	North Stonington	\$100.00 (or more)	\$100.00
1915	Wolcott	50.00	50.00
1916	Greenwich	2,000.00	100.00
1916	Kent	200.00	200.00
1916	Windham (Windham free public library)	100.00	100.00
1917	Middletown	1,500.00	100.00
1917	Hartford	28,000.00	100.00
1917	Hamden	50.00	50.00
1918	Plainfield	100.00	100.00

CLASSIFICATION OF LIBRARIES, 1916

Towns are classified as follows

CLASS I

Towns having free public libraries organized under the law of 1893 and the amendments of 1895 and 1911

Andover	Cromwell	Glastonbury
Ansonia	Danbury	Goshen
Avon	Darien	Granby (Frederick H Cossitt and *Granby public)
Berlin (Berlin free and Peck memorial)	Derby (Derby public and Derby Neck free)	Greenwich
Bethel	Durham	*Hampton
Bethlehem	Eastford	Harwinton
Bloomfield	East Haddam	Hebron
Bolton	East Hampton (East Hampton public and Middle Haddam public)	Huntington
Bridgewater	East Hartford	Kent
Bristol	East Haven	Killingly
Brooklyn	East Lyme	Lebanon
Burlington	East Windsor (East Windsor library association and Warehouse Point library association)	Litchfield
Canton	Ellington	Lyme
*Chaplin	Enfield	Madison
Cheshire	Farmington	Manchester
Chester		Mansfield
Clinton		Meriden
Colchester		Middlebury
Columbia		Middlefield
Coventry		

*Failed to comply with conditions, and so received no 1916 grant

Milford	Prospect	Tolland
Morris	Putnam	Union
New Britain	Roxbury	Vernon
New Canaan	Salem	Wallingford
New Fairfield	Salisbury	Watertown
New Hartford	Saybrook	Westbrook
Newington	Scotland	West Hartford
New Milford	Seymour	Westport
North Canaan	Somers	Wethersfield
North Haven	Southbury	Winchester
North Stonington	Southington	Windham (Windham free public and Willimantic)
Norwich	South Windsor (South Windsor public and Sadd memorial)	Windsor
Old Lyme	Stamford	Windsor Locks
Old Saybrook	Stratford	Wolcott
Orange	Suffield	Woodbury
Plainfield	Thomaston	Woodstock (Woodstock library and East Wood- stock library)
Plainville	Thompson	106 towns
Plymouth		114 libraries
Portland		

CLASS 2

Towns in which there are libraries free to all the people,
but having no legal connection with the town

Ashford	New London
Branchford	Newtown (Sandy Hook and Zoar libraries)
*Canton (North)	Norfolk
*Coventry (†Hale donation and Porter library)	†Norwalk (East Norwalk and Rowayton)
Fairfield (Pequot and Fairfield memorial)	Oxford
*Farmington	Pomfret (Pomfret library and Abington social library)
*Greenwich (Perrot memorial)	Preston
Griswold (Coit and Slater libraries)	Redding
Groton (Bill memorial and Library of the Noank Baptist church)	Sharon
Guilford	Sherman
Haddam	Stafford
Hamden	*Stamford (Glenbrook)
†Hartford (Watkinson library)	Stonington
Ledyard	*Vernon (Talcott library)
*Litchfield (Northfield)	Warren
*Manchester (South)	Washington
Montville	*Watertown
Naugatuck	*Winchester (Gilbert school library)
†New Haven (Donald Grant Mitchell library)	*Windham (Dunham Hall)
	38 towns
	45 libraries

*Free public library receiving state grant in same town

†Free to ministers of Coventry and surrounding towns

‡Free library, publicly supported, in same town

CLASS 3

Cities in addition to those in class 1 having libraries owned
and controlled by the public and free to all people

Bridgeport	Norwalk (City of Norwalk library and South Norwalk library)
Hartford	
New Haven	
	4 cities
	5 libraries

CLASS 4

Towns and cities in addition to those in class 1 in which
there are free public libraries to which the towns appropriate
money but are not represented in the management

Middletown	Simsbury	Waterbury
		3 towns and cities

PUBLIC LIBRARIES.

7

CLASS 5

Towns in which there are libraries charging fees

*Berlin (East)	Ridgefield
Canaan	Rocky Hill
Cornwall (Cornwall and West Cornwall)	*Sharon
Essex (Essex public and Ivoryton)	*Thompson (New Boston)
*Groton (Mystic and Noank)	Torrington
*Madison (East River)	Wilton
*New Haven (Young Men's Institute)	*Woodstock (West)
*New Milford (Phoenix library)	
*Newtown	
*Plymouth	

17 towns
19 libraries

*Free public library in same town

CLASS 6

Towns having no libraries

Barkhamsted	Easton	Sprague
Beacon Falls	Franklin	Sterling
Bethany	Hartland	Trumbull
Borrah	Killingworth	Voluntown
Brookfield	Lisbon	Waterford
Canterbury	Marlborough	Weston
Colebrook	Monroe	Willington
East Granby	North Branford	Woodbridge

24 towns

CLASSIFICATION OF LIBRARIES, 1918

Towns are classified as follows

CLASS 1

Towns having free public libraries organized under the law of 1893 and the amendments of 1895 and 1911

Andover	Eastford	Killingly
Ansonia	East Haddam	Lebanon
(a)Avon	East Hampton (East Hamp-	Litchfield
Berlin (Berlin free and Peck	ton public and MiddleHad-	Lyme
memorial)	dam public)	Madison
Bethel	East Hartford	Manchester
Bethlehem	East Haven	Mansfield
Bloomfield	East Lyme	Meriden
Bolton	East Windsor (East Wind-	Middlebury
Bridgewater	sor library association	Middlefield
Bristol	and Warehouse Point li-	Middletown
Brooklyn	brary association)	Milford
Burlington	Ellington	Morris
Canton	Enfield	New Britain
Chaplin	Farmington	New Canaan
Cheshire	Glastonbury	New Fairfield
Chester	Goshen	New Hartford
Clinton	Granby (Frederick H. Co-	Newington
Colchester	sitt and Granby public)	New Milford
Columbia	Greenwich	North Canaan
Coventry	Hamden	(b)North Haven
Cromwell	(b)Hampton	North Stonington
Danbury	Hartford	Norwich
Darien	Harwinton	Old Lyme
Derby (Derby public and	Hebron	Old Saybrook
Derby Neck free)	Huntington	Orange
Durham	Kent	

a Failed to comply with conditions and so received no 1918 grant
b Failed to comply with conditions and received no grants

Plainfield (Aldrich library and Plainfield library association)	Southbury	West Hartford
Plainville	Southington	Westport
Plymouth	South Windsor (South Windsor public and Saddle River memorial)	Wethersfield
Portland	Stamford	Windham (Windham free public and William H. Brewster)
Prospect	Stratford	Windsor
Putnam	Suffield	Windsor Locks
Roxbury	Thomaston	(c) Wolcott
Salem	Thompson	Woodbury
Salisbury	Tolland	Woodstock (Woodstock library and East Woodstock library)
Saybrook	Union	109 towns
Scotland	Vernon	118 libraries
Seymour	Wallington	
Somers	Watertown	
	Westbrook	

c Failed to comply with conditions and so received no 1917 grant

CLASS 2

Towns in which there are libraries free to all the people, but having no legal connection with the town

Ashford	New London
Branford	Newtown (Sandy Hook library)
*Canton	Norfolk
*Coventry (Hale donation and Porter library)	Norwalk (East Norwalk and Rowayton)
Fairfield (Pequot and Fairfield memorial)	Oxford
*Farmington	Pomfret (Pomfret library and Abington social library)
*Greenwich	Preston
Griswold	Redding
Groton (Bill memorial and library of the Noank Baptist church)	Sharon
Guilford	Sherman
Haddam	Stafford
*Hartford	*Stamford
Ledyard	Stonington
*Litchfield	Warren
*Manchester	Washington
Montville	*Watertown
Naugatuck	*Winchester
New Haven (Donald Grant Mitchell library)	*Windham
	36 towns
	41 libraries

* Free public library receiving state grant in same town

CLASS 3

Cities and towns in addition to those in class 1 having libraries owned and controlled by the public and free to all the people

Bridgeport	Norwalk (City of Norwalk library and South Norwalk library)
New Haven	Waterbury
	4 cities
	5 libraries

CLASS 4

The following town, in addition to those in class 1, has a free public library to which the town appropriates money but is not represented in the management

Simsbury

PUBLIC LIBRARIES.

9

CLASS 5

Towns in which there are libraries charging fees

*Berlin (East)	Ridgefield
Canaan	Rocky Hill
Cornwall (Cornwall and West Cornwall)	*Sharon
Essex (Essex public and Ivoryton)	*Thompson (New Boston)
*Groton (Mystic and Noank)	Torrington
*Madison (East River)	Wilton
*New Haven (Young men's institute)	*Woodstock (West)
*New Milford (Phoenix library)	
*Newtown	17 towns
*Plymouth	19 libraries

* Free public library in same town

CLASS 6

Towns having no libraries

Barkhamsted	Franklin	Trumbull
Beacon Falls	Hartland	Voluntown
Bethany	Killingworth	Waterford
Bosrah	Lisbon	Weston
Brookfield	Marlborough	Willington
Canterbury	Monroe	Woodbridge
Colebrook	North Branford	
East Granby	Sprague	24 towns
Easton	Sterling	

2 ADVICE AND ASSISTANCE TO LIBRARIES IN SELECTION OF BOOKS AND ADMINISTRATION

SELECTION AND PURCHASE OF BOOKS FOR LIBRARIES, 1915 AND 1916

Fifty-two libraries listed below received assistance in selection of books and purchase of books and supplies, not from state funds

Ansonia	East Windsor	Newington
Avon	East Windsor (Warehouse Point)	Old Saybrook
Berlin	Enfield	Plainfield
Bethlehem	Granby	Plymouth
Bloomfield	Granby (North)	Roxbury
Bolton	Greenwich	Salem
Bridgewater	Harwinton	Simsbury
Bristol	Hebron	Somers
Brooklyn	Kent	Thomaston
Canton	Lyme	Union
Chaplin	Manchester	Watertown (Oakville)
Chester	Mansfield	Westbrook
Clinton	Middlefield	Wethersfield
Colchester	Milford	Windsor
Connecticut industrial school for girls	Montville (Palmer memorial)	Windsor Locks
Cromwell	New Fairfield	Wolcott
Eastford	New Hartford	Woodstock
East Haven		

Books and supplies to the amount of \$802.14 were purchased by this committee and paid for by funds supplied by the libraries.

The purchases included 676 books, catalog cards, filing cabinets, desks and other supplies.

PUBLIC LIBRARIES

SELECTION AND PURCHASE OF BOOKS FOR
 Twenty-seven libraries listed below received
 selection of books and purchase of books
 from state funds

- Ansonia
- Bloomfield
- Clinton
- Cromwell
- East Windsor (Warehouse)
- Plainfield
- Shelton
- Glendonbury
- Grassby
- Harwinton

- Hartford
- Kent
- Litchfield (Gilbert Library)
- Manchester
- Middlefield
- New Fairfield
- Newington
- Old Saybrook
- Plymouth

- Putnam
- Salem
- Somers
- Thomaston
- Union
- Watertown (Oakville)
- Westbrook
- Windsor
- Windsor Locks

Books and supplies to the amount of \$507.94 were purchased
 by this committee and paid for by funds supplied by
 the purchases included 385 books, catalog cards, a
 cabinet and miscellaneous supplies.

The visitor and inspector of libraries has made 58
 visits to libraries. 1915 and 1916

40 libraries were visited

- Bethel
- Bloomfield
- Bolton
- Clinton
- Cromwell
- East Windsor (Warehouse)
- Plainfield
- Shelton
- Glendonbury
- Grassby
- Harwinton

- Farmington
- Greenwich
- Harwinton
- Lebanon
- Middlefield
- Miller
- New Fairfield
- Newington
- North Haven (Montowese branch)

- North Stonington
- Salem
- Seymour
- Waterbury
- Westbrook
- Westport
- Westfield
- Westham (WV)
- Windsor Locks

Assistance in organization or cataloguing was
 following towns

- Canton
- East Windsor (Warehouse)
- Farmington (Oakville)
- Harwinton
- New Fairfield
- Newington
- Salem
- Somerville

In the following towns the visitor and inspector
 of library directors or trustees for conferences

- Bloomfield
- Cromwell
- East Windsor
- Plainfield
- Shelton

- Farmington
- Greenwich
- Harwinton
- Middlefield
- New Fairfield

- Watertown
- Westbrook
- Windsor

Special reports, copies of which were sent to all the members of the respective library boards, were prepared on conditions in the following libraries

Brooklyn	Lebanon	New Fairfield
Danbury	Milford	Westport
		8 libraries

The following libraries which do not receive state grant were visited

Connecticut reformatory (Cheshire)	Groton (Noank Library)	Watertown
Coventry (North)	New London	Wilton
Fairfield	Norwalk	
	Simsbury	9 libraries

VISITS TO LIBRARIES, 1917 AND 1918

The visitor and inspector of libraries has made 86 visits to 54 libraries. Libraries in the following towns, receiving state grant, have been visited

Andover	Granby	Orange
Berlin	Greenwich	Putnam
Bridgewater	Hampton	Roxbury
Bristol	Kent	Saybrook
Canton	Killingly	Somers
Chaplin	Litchfield	Stamford
Clinton	Manchester	Stratford
Colchester	Middlefield	Westbrook
Coventry (South)	Middletown	West Hartford
Danbury	Milford	Windham
Darien	New Fairfield	Windsor (Poquonock branch)
Eastford	Newington	Windsor Locks
East Hampton	New Milford	Wolcott
East Hartford	North Haven	
East Windsor (Warehouse Point)	Norwich	
	Old Saybrook	44 libraries

Assistance in organization or cataloguing was given in the following towns

Canton	Granby	Watertown
Clinton	New Fairfield	Westbrook
East Windsor (Warehouse Point)	Putnam	Windham
	Somers	Windsor Locks
		11 towns

In the following towns the visitor and inspector met one or more of the directors or trustees for conferences

Andover	Manchester	Old Saybrook
Canton	Middlefield	Putnam
Clinton	Middletown	Saybrook
Darien	New Fairfield	Stamford
Eastford	Newington	Windham
East Hampton	North Haven	Windsor Locks
Litchfield		19 towns

The following libraries which do not receive state grant were visited

PUBLIC LIBRARIES.

Branford
Bridgeport
Fairfield
Jewett City (town of
Griswold)

Ledyard
Northfield (town of
Litchfield)
Norwalk
Rocky Hill

Stamford (library of Yale
& Towne manufactur-
ing co)
Watertown
10 libraries

The chairman of the Connecticut public library committee has visited the following libraries

receiving state grant

Ansonia
Bridgewater
Danbury

Hampton
Hebron
Lebanon

Salisbury
Stamford
Woodbury
9 libraries

not receiving state grant

Branford

Canaan

Redding
3 libraries

The secretary of the Connecticut public library committee has visited the following libraries

receiving state grant

Bethel
Bloomfield
Bristol
Danbury
East Windsor (Warehouse
Point)

Meriden
Middlebury
New Britain
Newtown
North Stonington
Southington

Willimantic
Windsor
Windsor Locks
Woodbury
15 libraries

not receiving state grant

New Haven

Torrington

2 libraries

3 ADVICE AND ASSISTANCE TO TEACHERS, COMMITTEES AND SUPERVISORS IN SELECTION AND PURCHASE OF BOOKS FOR SCHOOL LIBRARIES

1915 AND 1916

Books, maps, apparatus and supplies have been purchased for the public schools in 39 towns. In many cases the lists for purchase were made up by the committee. Books were also selected and purchased for one Sunday School, six schools in County temporary homes, and for the Connecticut industrial school for girls. \$1,819.51 has been expended, in part from town appropriations, in part from state grants. 2,298 books were purchased, besides maps, globes, physical and chemical apparatus and stereopticon lanterns and slides.

The school libraries listed below have been visited

Danbury normal school
New Haven normal school

Gilbert school, Winsted
Greenwich high school

Schools in the following towns were visited to interest the children in reading from school libraries and traveling libraries

Barkhamsted
Colebrook

Hartland
Sprague

1917 AND 1918

Supervisors, teachers or school committees in 37 towns and in 6 County temporary homes for children have requested us to purchase for them books and apparatus for schools. \$3,086.70 was expended, in part from town appropriations, in part from state grants. The purchases included 2,940 books, 14 globes, 58 maps, 884 stereographs and miscellaneous chemical, physical and geographical apparatus.

The school libraries listed below were visited

Branford high school
Bacon academy, Colchester

Torrington high school
Connecticut industrial school for girls

The library of the Torrington high school was organized and catalogued under the direction of the committee.

Grade schools in Branford and Roxbury were visited to investigate the school libraries and the cooperation between the public libraries and the schools.

4 PRINTING AND DISTRIBUTION OF DOCUMENTS

The committee has printed and distributed the documents listed below

year	no	whole no	title	no copies distributed
1915	1	80	Suggestive program for Library day	7,041
1916	1	81	Suggestive program for Library day	7,063
1918	1	82	Report of campaign for camp library fund in Connecticut	1,047

5 CIRCULATION OF BOOKS, PICTURES AND LECTURES AMONG SCHOOLS

1915 AND 1916

REPORT OF TRAVELING LIBRARIES LOANED TO SCHOOLS

101 Colonial Dames traveling libraries went out 323 times. The circulation reported was 15,693. No report of circulation was received from 38 of the loans. This shows an average

circulation of 55 volumes in each school to which libraries were sent from which we received a report.

69 Audubon traveling libraries were sent out 140 times. The total circulation reported was 5,147. In 22 cases no report of circulation was made. This shows an average circulation of 43.6 volumes in each of the schools from which we received a report.

58 libraries owned by this committee were sent out 134 times. The total circulation reported was 6,225, and in 22 cases no report of circulation was made. This shows an average circulation of 55.5 volumes in each school reporting.

Total number of loans of libraries to schools, 597

Total number of volumes circulated in schools reporting, 27,065

REPORT OF PICTURES

53 portfolios of pictures supplied by the Colonial Dames were sent out to schools 107 times.

56 portfolios supplied by the Audubon society were sent out.

704 Audubon bird charts were loaned.

72 collections of mounted post cards of birds, supplied by the Audubon society, were sent out.

120 framed pictures, owned by this committee, were loaned to schools and libraries.

109 collections, containing 1,789 unframed pictures, were sent to schools, libraries and study clubs.

Total number of loans of pictures, 813.

REPORT OF STEREOPTICON LECTURES

21 lectures, mostly on travel, owned by the State board of education, have been used 565 times with a total attendance of 65,437. 39 lecturers failed to report the attendance.

3 lectures on birds, supplied by the Audubon society, have been used 62 times, before audiences numbering 8,684. 2 lecturers failed to report the number present.

4 lecturers on United States history, provided by the Colonial Dames, were used 112 times, with a total attendance of 18,556. 22 lecturers made no reports of attendance.

Total number of times lectures were used, 739.

Total attendance at 676 lectures, 92,677.

6 BOOKS AND PICTURES FOR USE OF LIBRARIES, CLUBS
INDIVIDUALS AND NEIGHBORHOODS

1915 AND 1916

REPORT OF ADULT LIBRARIES OWNED BY THIS COMMITTEE

35 libraries of miscellaneous books were sent out to small public libraries, country neighborhoods, churches, Sunday schools and summer camps 50 times. The total circulation reported was 4,371, an average circulation of 80.7 volumes for each loan.

29 libraries on special subjects were sent out. The total circulation reported was 879.

5 libraries in Italian, Polish and Hungarian were sent out 8 times, with a total circulation of 292 volumes.

4 Grange libraries have been sent out and a total circulation of 182 reported. The falling off in the number of requests for these libraries and the small circulation reported in many cases justify the discontinuance of this series of libraries. The books will be added to the miscellaneous collections which are circulated in rural communities. Such collections will be supplied to any Granges who wish traveling libraries, but no collections will be kept for the exclusive use of Granges.

932 books and 41 pamphlets have been loaned in 154 collections to individuals for special study.

REPORT OF BOOK WAGON

Four towns received irregular traveling library service from the book wagon. 1,963 books were loaned, in 305 calls. 62.9 per cent of the volumes loaned were fiction.

TOTAL CIRCULATION OF ALL TRAVELING LIBRARIES SENT OUT BY THE
PUBLIC LIBRARY COMMITTEE

The total number of loans of books, including special loans and traveling libraries, was 1,147. The total circulation reported from these loans was 35,725.

CIRCULATION OF BOOKS, PICTURES AND LECTURES AMONG SCHOOLS

1917 AND 1918

The committee has the following material to loan to schools

100 libraries loaned by the Colonial Dames

53 portfolios of pictures loaned by the Colonial Dames

- 69 libraries loaned by the Audubon society
- 377 bird charts loaned by the Audubon society
- 75 portfolios of pictures of animals, birds and flowers loaned by the Audubon society
- 37 libraries owned by this committee
- 95 framed pictures owned by this committee
- unframed pictures owned by this committee (number constantly changing by renewals and discards)
- 17 stereopticon lectures owned by the State board of education
- 4 stereopticon lectures loaned by the Colonial Dames
- 4 stereopticon lectures loaned by the Audubon society

REPORT OF TRAVELING LIBRARIES LOANED TO SCHOOLS

100 libraries, supplied by the Colonial Dames, were loaned 181 times. The circulation reported was 9,076. 32 teachers failed to make reports.

The Audubon libraries were loaned 96 times. No reports were received from 29 schools. The total circulation in 67 schools was 3,314 volumes.

37 libraries, owned by this committee, were sent out to 49 schools. A total circulation of 1,440 was reported in 31 schools. The others failed to report.

Total number of loans of books to schools, 326.

Total number of volumes circulated in schools reporting, 13,830.

REPORT OF PICTURES

61 Colonial Dames portfolios of pictures and 38 Audubon portfolios were loaned to schools.

494 Audubon bird charts were sent out to schools.

105 framed pictures were loaned to schools and libraries.

1,101 unframed pictures were sent, in 69 collections, to schools.

REPORT OF STEREOPTICON LECTURES

17 stereopticon lectures on different countries, animals, birds and schoolhouses were used 358 times, with attendance of 48,730 reported. 33 lecturers made no reports of attendance.

4 lectures on birds, owned by the Audubon society, were used 60 times. 6 lecturers failed to report. 54 lecturers reported a total attendance of 9,131.

4 lectures on United States history, owned by the Colonial Dames, were used 101 times. 11 lecturers failed to report

attendance. At the remaining 90 lectures, the total attendance was 13,818.

Total number of lectures sent out, 519.

Total attendance reported, 71,679.

BOOKS AND PICTURES FOR USE OF LIBRARIES, CLUBS, INDIVIDUALS
AND NEIGHBORHOODS

1917 AND 1918

This committee now has the following material to loan to neighborhoods, libraries, associations and individuals

39 adult libraries of miscellaneous books owned by this committee
42 special libraries owned by this committee on the following subjects

Africa	Missions
*American art	Missions of the South seas
China	Missions in the United States
Connecticut history	Music
*Dutch and Flemish art	*Norway
England	Nature study
English art	Oriental art
Egypt	Poland
European history and Napoleon	Russia
Bonaparte	*Scotland
French art	*Shakespeare
French history	South America
Germany	Spanish art
*Holland and Switzerland	*Trees
Home economics	Travel
Immigration	United States history
India	*Venice
*Italy	Woman; her relation to the world's
*Japan	progress
Mexico	*Western states of the United States

5 libraries of foreign books owned by this committee

* Indicates that the libraries are accompanied by pictures

REPORT OF ADULT LIBRARIES AND BOOK WAGON

41 adult traveling libraries were sent out. No report of circulation was received from 6 libraries. The total circulation reported was 3,141.

435 books and 61 pamphlets have been loaned in 123 collections to individuals for special study.

3,745 books were distributed from the book wagon, in 674 calls. 59.9 per cent of the volumes distributed in this way were fiction.

TOTAL CIRCULATION OF ALL TRAVELING LIBRARIES SENT OUT BY THE
PUBLIC LIBRARY COMMITTEE

The total number of loans of books, including special loans and traveling libraries, was 1,164. The total circulation reported from these loans was 21,212.

7 PUBLIC MEETINGS

1915 AND 1916

A public meeting for librarians and others was arranged in connection with the meeting of the New England club of library commission workers held in Hartford, January 26, 1915. The program follows

Library work with foreigners
Miss J M Campbell, Boston, director of work with foreigners
Discussion led by Miss Ida M Farrar, City library, Springfield, Massachusetts
The heretic's library
Mr Edmund Lester Pearson, editor of publications,
New York public library

A neighborhood library meeting arranged by this committee was held in the Rockville library December 13, 1916. The meeting was attended by librarians, library directors, school teachers, supervisors and others from eight towns. The program follows

10:00 a m Roll call of libraries represented
12:30 p m Luncheon
1:30 p m Children's books of the year
Miss Caroline M Hewins, librarian, Hartford
Possible co-operation between libraries and schools
Discussion led by Mrs Belle Holcomb Johnson

The committee has been represented by members or by the visitor and inspector at the following meetings

New England club of library commission workers, Hartford, January 25 and 26, 1915
Connecticut library association, West Haven, February 1915
Western Massachusetts library club, Chicopee, Massachusetts, February 1915
Massachusetts library club, Northfield, Massachusetts, October 1915
Connecticut library association, Norwich, June 1916
Connecticut library association, Seymour, October 1916
New England club of library commission workers, Augusta, Me. November 1916
Meeting in the interest of education, Canterbury, December 1916

The visitor and inspector has addressed the following public meetings

	time	occasion	subject
January	1915	South Coventry library	Japan (with stereopticon slides)
February	1915	Dedication of Bethel library	
March	1915	South Coventry library	Rocky Mountains (with stereopticon slides)
March	1915	Teachers' club, Vernon	Books and reading
June	1915	Community gathering, North Stonington	School improvement (with stereopticon slides)
June	1915	Joint meeting of Massachusetts, Rhode Island, and Connecticut library associations, Jamestown, R I	Selection of children's books
July	1915	Summer normalschool, Storrs	Rocky Mountains (with stereopticon slides)
October	1915	Annual meeting of Connecticut Audubon society, Fairfield	Report of traveling material loaned by Audubon society
October	1915	Teachers' meeting, East Windsor	Uses of books in schools
April	1916	Senior class of New York City library school	Instructional side of commission work
June	1916	American library association, Asbury Park, N J	Connecticut book wagon
September	1916	Wilton civic league	Possibilities of library work in a small town
October	1916	Annual meeting of Connecticut Audubon society, Fairfield	Report of traveling material loaned by Audubon society
October	1916	Field day of senior class, Hartford theological seminary, North Coventry	Work of the Connecticut public library committee for rural communities
November	1916	Teachers' meeting, South Coventry	Uses of books
November	1916	Connecticut college, classes in library economy	Work of the Connecticut public library committee

Library institutes were held at the Connecticut agricultural college, Storrs, July 19-30, 1915 and August 14-25, 1916.

The total registration in 1915 was 25. The average attendance at all the sessions, exclusive of lectures, was 17. 15 students worked throughout the session and handed in work for correction. The average attendance at the lectures was 26.5.

The total registration in 1916 was 28. 19 students were present at every session. The average attendance at the sessions in which instruction and practical work was given was 25 and the average attendance at the lectures was 50.6. 94 different people attended the sessions.

The place was most advantageous for the work of the institute, because of the healthful and beautiful location, the freedom from distractions, the convenience of the dormitory life, and the advantages offered by the college library, which, both the room and the books, was placed entirely at the service of the instructors and students. The college librarian was most helpful in every possible way.

Programs of the lectures for the two years follow. The instruction covered library methods and administration, reference work, story telling and work with schools. The instructors were Mrs Belle Holcomb Johnson and Miss Anna Hadley in 1915 and Mrs Johnson and Miss Frances Hobart in 1916.

1915

- Modern tendencies in reading
 - Mr Charles D Hine
- Relation of the library to the community
 - Mr Charles F D Belden, chairman of the Massachusetts free library commission
- Selection of books for children
 - Miss Caroline M Hewins, secretary of the Connecticut public library committee
- Story-telling
 - Mrs Mary E S Root, children's librarian, Providence, Rhode Island
- Recent books suitable for small libraries
 - Mrs Belle Holcomb Johnson
- Recent books helpful in work with schools
 - Miss Anna Hadley
- Care of books and repairing
 - Miss Ethel R Bahr, Warehouse Point
- The librarian's outlook
 - Miss Alice Shepard, City library, Springfield, Massachusetts
- Reference work and reference books
 - Miss Hadley
- Our widest field
 - Mr Frank G Willcox, librarian, Holyoke, Massachusetts
- Books on agriculture and country life
 - Miss Edwina Whitney, librarian, Connecticut agricultural college, Storrs
- Rural club work
 - Miss Estella Sprague, assistant state club organizer

1916

- Reference work
 - Mr Robert K Shaw, librarian, Worcester, Massachusetts
- Some recent books
 - Miss Caroline M Hewins, secretary of the Connecticut public library committee
- Children's books
 - Miss Annie Carroll Moore, supervisor of children's rooms, New York public library
- Book binding
 - Miss Frances Hobart

- Joy of being ready
 - Mr Frederick W Jenkins, librarian, Russell Sage Foundation, New York
- Popularization of good reading
 - Arthur E Bostwick, librarian, St Louis, Missouri
- Work with schools
 - Mr Charles L Wooding, librarian, Bristol
 - Miss Bessie Connolly, librarian, Old Lyme
 - Mrs George W Tryon, librarian, North Stonington
 - Mrs Katherine Sweet, librarian, Lebanon
- A superintendent's ideal for a public library
 - Mr George J Vogel, superintendent of schools, Torrington
- Possibilities of library work in small towns
 - Miss Frances Hobart
 - Mr J L Peacock, librarian, Westerly, Rhode Island

1917 AND 1918

Neighborhood library meetings, arranged by this committee, were held in the Danielson library February 13, 1917 and in the Torrington high school April 27, 1917. These meetings were attended by librarians, library directors, school teachers, supervisors and others from eighteen towns. The programs follow

Danielson

- 10:00-12:00 Roll-call of libraries represented
 - Question box
- 12:30 Luncheon
- 1:30 Some recent books
 - Miss Jessie Hayden, librarian, East Hartford
- 2:15 The importance of words
 - Mr H A Tirrell, principal of Norwich free academy, Norwich
- 3:00 Possibilities of library service to schools
 - Discussion

Torrington

- 10:00 Roll call of libraries represented
- 11:00 Question box
- 11:30 Place of the public library in the community
 - Discussion led by Mr C L Wooding, librarian, Bristol
- 12:30 Luncheon
- 2:00 Some recent books
 - Miss Grace Child, librarian, Gilbert school, Winsted
- 3:00 Possibilities of library service to schools
 - Discussion led by Mrs Belle Holcomb Johnson

The committee has been represented by members or by the visitor and inspector at the following meetings

Connecticut library association, New London, June 1917

Committee of American library association, Atlantic City, New Jersey,

July 1917

Meeting of librarians and library trustees of New England (to plan for camp library campaign) Boston, Massachusetts, September 1917

Meeting called by the Finance committee of the war service board of the American library association, Washington, D C, August 1917
 Connecticut library association, Hartford, September 1917
 Western Massachusetts library club, Northampton, Massachusetts, February 1918
 Connecticut library association, New Haven, February 1918
 New England club of library commission workers, Boston, Massachusetts, May 1918
 Massachusetts library club, Camp Devens, Ayer, Massachusetts, May 1918
 Connecticut library association, Putnam, June 1918
 American library association, Saratoga, July 1918
 New York state library club, Lake Placid, N Y September 1918
 Connecticut library association, Bridgeport, November 1918

The visitor and inspector has addressed public meetings, schools and clubs as follows

	time	occasion	subject
January	1917	South Coventry library	Connecticut valley and coast of New England (with stereopticon slides)
February	1917	Rocky Hill library association	History of public library development and work of Connecticut public library committee
February	1917	Middlesex county teachers' association	Audubon traveling material
February	1917	Teachers' meeting, Somers	Children's reading
February	1917	Ladies aid society, Somers	Japan (with stereopticon slides)
March	1917	South Coventry library	United States history—Colonial period (with stereopticon slides)
April	1917	South Coventry library	Animals (with stereopticon slides)
April	1917	Community gathering, North Westchester school	Birds (with stereopticon slides)
April	1917	South Coventry library	Birds (with stereopticon slides)
May	1917	Home for crippled children, Newington	Birds (with stereopticon slides)
May	1917	Joint meeting of Men's club and Women's club, Montowese	Books and reading
May	1917	Danbury normal school	United States history—Discovery and colonial period (with stereopticon slides)
May	1917	Community gathering, Lyman Viaduct school	Birds (with stereopticon slides)
May	1917	South Coventry library	United States history—Revolutionary period (with stereopticon slides)
June	1917	Community gathering, Mansfield library	Birds (with stereopticon slides)

June	1917	Country church conference, Storrs	Connection between church and library —Work of the Connecticut public library committee
July	1917	Model school teachers' section, summer normal school	School libraries
October	1917	Annual meeting of the Connecticut Audubon society	Report of traveling material loaned by Audubon society
October	1917	Meeting of the Wellesley club, Hartford	Camp libraries
November	1917	Group meeting of school committees, Old Saybrook	Relations between schools and libraries
November	1917	Meeting of Daughters of the American revolution, West Hartford	Camp libraries
December	1917	Group meeting of school committees, New Milford	Libraries and schools
December	1917	Group meeting of school committees, Danbury	Libraries and schools
December	1917	Group meeting of school committees, Norwich	Libraries and schools
December	1917	Group meeting of school committees, Willimantic	Libraries and schools
February	1918	Teachers' meeting, Branford	Reference books — Uses of books
April	1918	South Coventry library	United States history—Civil war (with stereopticon slides)
April	1918	Stanley Quarter bird club, New Britain	Birds (with stereopticon slides)
May	1918	South Coventry library	Mississippi valley and Southern states (with stereopticon slides)
October	1918	Annual meeting of Connecticut Audubon society	Report of traveling material loaned by Audubon society

Library institutes were conducted in connection with summer schools at Danbury August 13 to August 24, 1917 and July 8 to July 20, 1918.

The total registration in 1917 was 22. 13 students attended every session. The average attendance of the class at morning sessions was 18.5, at the afternoon and evening lectures, 27.6. The registration included four librarians of public libraries, one high school librarian, 11 library assistants, two teachers and four others.

In 1918, 14 students were in attendance the first week and 15 the second week. The average attendance at the periods of instruction was 12.6. Seven lectures were given by librarians not connected with the school. The total attendance at nine afternoon and evening lectures, exclusive of members of the class, was 199.

Programs of the lectures follow. The instructors both years were Mrs Belle Holcomb Johnson and Miss Frances Hobart.

1917

- Reference books
 - Miss Hobart
- The library and the public school
 - Mr George J Vogel, superintendent of schools, Torrington
- The psychological moment at the charging desk
 - Miss Theresa Hitchler, head of cataloguing department, Brooklyn public library, Brooklyn, New York
- Book binding
 - Miss Hobart
- Book repairing
 - Miss Ethel Bahr, Warehouse Point
- Some recent books
 - Miss Caroline M Hewins, librarian, Hartford
- Story-telling
 - Mrs Mary ES Root, children's librarian, Providence, Rhode Island
- Library work with children
 - Mrs Root
- "Our young folks" and its contributors
 - Miss Caroline M Hewins
- Children's books
 - Mrs Root
- The library and the high school
 - Mr W D Hood, principal Gilbert school, Winsted
- Libraries and life
 - Mr J I Wyer, jr. director New York state library and New York state library school, Albany

1918

- Reference books
 - Miss Hobart
- Some recent fiction
 - Miss Lucy C Richmond, head of the circulating department, City library, Springfield, Massachusetts
- Some recent books in other classes
 - Miss Ella McDowell, librarian, Danbury
 - Miss Lorna Wardwell, assistant librarian, Danbury
- Brook Farm
 - Miss Caroline M Hewins, librarian, Hartford
- Children's books
 - Miss Agnes Cowing, children's librarian, Pratt institute, Brooklyn, New York
- Library work with children
 - Miss Cowing
- The library and the community
 - Mrs Johnson and Miss Hobart
- Poetry
 - Miss Elizabeth Hanley, English teacher at summer normal school,
- Library publicity (illustrated lecture)
 - Mr John A Lowe, librarian, Camp Devens, Ayer, Massachusetts
- Libraries and the war
 - Mr Lowe
- Work of a camp library
 - Mr Lowe

The foregoing account summarizes the varied activities of this committee in establishing and developing libraries, training librarians and meeting the needs of the communities without public libraries.

Tabulated statistics of the public libraries of the state follow.

CHARLES D HINE
CAROLINE M HEWINS
HENRY A TIRRELL
GEORGE A CONANT
GEORGE J VOGEL

STATISTICS OF LIBRARIES

Libraries maintaining branches

(This does not include collections placed in schools unless they are selected for community use and are opened as branches)

town	number of branch libraries	location
Bloomfield	1	North Bloomfield
Branford	1	Stony Creek
Bridgeport	2	North end East Bridgeport
Bristol	2	Forestville East Bristol
Cheshire	1	Cheshire Street
Danbury	1	Great Plain
Derby (Harcourt Wood Memorial)	2	Franklin school Blumenthal's mills
East Hartford	2	Burnside Hockanum
East Lyme	5	Flanders Niantic Hill Walnut Hill Little Boston Black Point
Glastonbury	4	Buckingham East Glastonbury Hopewell South Glastonbury
Haddam	1	Higganum
Hartford	2	Parkville Wethersfield Ave
Harwinton	1	White Hills
Huntington	3	South End Huntington Center

Lyme	4	Brockway Hadlyme North Lyme Grassy Hill
Mansfield	6	Mansfield Hollow Spring Hill Chestnut Hill Conantville Atwoodville Merrow
Middlefield	2	Rockfall Baileyville
Middletown	2	South Farms Westfield
Montville	1	Uncasville
New Britain	1	
New Hartford	1	Bakerville
New Haven (New Haven public)	4	Lowell House Fair Haven Congress Dixwell
New Milford	1	Gaylordsville
North Haven	1	Montowese
North Stonington	1	Clarks Falls
Old Lyme	2	South Lyme South Lyme school
Saybrook	1	Winthrop
Sharon	2	Sharon mountain Woodward district
Somers	1	*Somersville
Southington	3	Andrews Street Milldale Marion
Stamford		deposit stations only
Suffield	1	West Suffield
Vernon (Rockville public)	1	Vernon
Wallingford	1	Yalesville
Washington	1	Valley
Waterbury	3	Waterville Rose Hill Brooklyn
West Hartford	2	Elmwood
Wilton	3	Seymour Street Bald Hill North Wilton Hurlbutt Street
Windsor	2	Poquonock Hayden Station
Woodbury	3	Hazel Plain Weekepeemee Minortown

*Not strictly a branch. Books sent weekly for registered borrowers, and distributed from the post office.

TABLE I

STATE GRANTS

The amount paid by the state for books in each fiscal year since the law was passed is shown by the following table

Year ending September 30	1893	.	.	.	\$
"	"	"	"	"	564.13
"	"	"	"	"	1,333.33
"	"	"	"	"	3,731.44
"	"	"	"	"	4,896.24
"	"	"	"	"	3,186.39
"	"	"	"	"	4,880.52
"	"	"	"	"	5,343.78
"	"	"	"	"	5,260.22
"	"	"	"	"	5,393.30
"	"	"	"	"	8,029.20
"	"	"	"	"	6,244.63
"	"	"	"	"	7,402.68
"	"	"	"	"	7,540.36
"	"	"	"	"	10,456.80
"	"	"	"	"	9,590.93
"	"	"	"	"	10,107.99
"	"	"	"	"	8,459.86
"	"	"	"	"	10,539.88
"	"	"	"	"	9,756.18
"	"	"	"	"	9,418.98
"	"	"	"	"	10,621.92
"	"	"	"	"	5,997.18
"	"	"	"	"	10,306.34
"	"	"	"	"	11,438.84
"	"	"	"	"	12,755.91

TABLE II
EXPENSES OF LIBRARIES, BASIS OF STATE GRANT, 1915

TOWN	books	periodicals	binding	librarians	rent	heat	light	janitors	printing	miscellaneous	total
1 Andover	24.10	20.55	....	25.01	....	8.75	2.00	....	....	17.88	98.21
2 Ansonia	832.38	193.41	208.33	1,786.00	....	271.12	249.79	624.00	....	510.32	4,683.31
3 Avon	....	....	....	38.10	1.50	....	5.52	....	....	40.12	40.12
4 Berlin (Berlin free)	45.66	10.60	....	36.50	....	7.50	6.00	12.00	....	15.50	143.76
5 Berlin (Peck Memorial)	....	9.85	....	19.50	....	9.75	13.50	19.50	....	61.05	113.65
6 Bethel	148.22	....	102.96	125.00	132.00	233.42	....	....	13.41	66.55	731.56
7 Bethlehem	32.01	12.65	....	25.00	....	....	....	2.70	....	4.70	73.06
8 Bloomfield	433.34	146.79	31.00	200.00	....	....	....	....	....	48.71	850.14
9 Bolton	....	....	....	....	....	....	....	....	....	....	....
10 Bridgewater	....	11.75	....	26.00	....	....	....	26.00	....	28.16	61.91
11 Bristol	2,191.48	320.35	350.02	3,596.87	....	260.20	376.55	372.00	132.71	2,767.60	10,420.12
12 Brooklyn	141.86	26.35	....	50.00	....	2.88	....	4.00	3.65	20.82	230.67
13 Burlington	....	10.35	....	25.00	....	....	....	....	....	14.65	50.22
14 Canton	219.97	22.50	41.95	151.80	....	....	7.97	18.00	....	60.46	515.25
15 Chaplin	....	6.00	....	25.00	....	17.55	3.85	....	....	1.47	53.27
16 Cheshire	321.00	15.25	20.00	200.00	....	....	....	....	....	3.54	559.79
17 Chester	81.72	28.25	15.75	150.00	....	53.74	19.00	90.00	....	62.60	501.77
18 Clinton	75.00	10.00	....	208.00	96.00	25.00	18.00	....	....	102.58	532.58
19 Colchester	....	33.95	26.04	167.10	....	89.96	1.00	104.53	11.50	128.30	509.47
20 Columbia	40.64	13.65	....	50.00	....	11.00	2.02	....	2.50	154.43	274.24
21 Coventry	98.50	22.50	....	227.12	....	....	19.95	138.95	8.63	995.78	1,441.41
22 Cromwell	33.20	30.17	3.85	60.75	....	4.35	8.50	20.25	....	20.45	181.22
23 Danbury	1,090.21	172.00	239.02	2,462.25	....	407.84	244.59	364.80	20.67	1,234.77	6,252.15
24 Darien	....	20.27	....	187.50	240.00	74.67	26.73	30.00	2.25	43.50	625.12
25 Derby	679.69	150.25	284.05	2,403.38	....	303.33	198.62	605.13	....	526.80	5,100.23
(Derby public)	....	....	....	....	....	....	....	....	....	....	....
26 Derby (Derby Neck library)	2816.05	....	32.86	....	....	13.95	10.23	47.20	....	112.83	1,032.12
27 Durham	106.99	....	....	150.00	....	25.25	....	33.50	2.75	42.50	300.39
28 Eastford	1.25	11.00	....	35.00	12.00	....	20	....	....	15.30	74.73
29 East Haddam	....	61.76	27.80	300.00	....	64.01	51.60	52.00	....	59.50	612.07
30 East Hampton (East Hampton public)	258.06	8.75	112.45	197.08	....	....	3.60	....	19.25	60.77	652.96
31 East Hampton (Middle Haddam)	121.21	....	....	42.65	....	....	27	....	....	16.42	150.28
32 East Hartford	261.22	....	109.22	645.87	....	....	....	....	....	153.52	1,260.83
33 East Haven	26.34	....	26.05	50.00	48.00	1.32	3.25	19.00	....	7.56	161.52
34 East Lyme	17.03	44.25	16.03	....	30.00	....	....	....	....	30.64	135.95
35 East Windsor (E. Windsor library association)	83.09	....	8.05	....	....	....	....	....	....	3.58	94.72
36 East Windsor (Warehouse Point)	171.29	30.10	61.65	84.00	....	6.75	21.75	....	....	299.20	574.24
37 Ellington	3.50	49.55	....	261.00	....	212.67	63.63	250.00	....	63.11	902.26
38 Enfield	71.42	56.80	36.35	480.20	....	23.25	12.23	125.04	....	420.45	1,094.74
39 Farmington	83.04	20.65	15.48	100.00	....	....	....	....	....	131.55	320.07
40 Glastonbury	59.79	....	91.80	17.62	30.00	7.50	7.00	9.38	2.00	131.77	357.06
41 Goshen	33.04	1.15	18.25	50.00	9.00	3.50	3.75	4.00	....	5.06	127.70
42 Granby	....	....	....	....	....	....	....	....	....	....	....
(Granby public)	....	....	....	....	....	....	....	....	....	....	....
43 Granby (Frederick H. Cossitt library)	22.20	38.23	....	50.00	....	5.00	2.47	15.00	....	7.23	147.13
44 Hampton	77.48	....	....	25.00	....	2.75	....	....	....	....	105.23
45 Harwinton	100.00	30.65	....	200.00	....	73.00	....	....	....	101.50	505.15
46 Hebron	....	24.70	12.40	40.00	....	15.30	6.00	4.70	....	4.78	113.18
47 Huntington	487.35	156.74	109.58	1,578.08	....	191.07	166.57	300.00	54.54	1,234.21	4,472.73
48 Killingly	253.47	77.61	93.33	523.00	....	108.75	117.62	158.90	11.65	313.56	1,065.26
49 Lebanon	33.05	16.35	....	50.00	....	6.75	....	....	....	13.35	119.25
50 Litchfield	400.03	40.74	111.80	704.50	....	158.78	107.10	166.00	....	167.14	1,404.29
51 Lyme	35.18	....	....	....	....	....	....	....	7.30	5.00	47.48
52 Madison	449.47	184.87	79.06	708.80	....	146.55	103.36	300.00	48.58	874.69	2,864.44
53 Manchester	250.00	32.05	22.67	275.00	100.00	21.63	25.08	....	....	73.68	812.41

a includes light

b includes supplies

c includes periodicals

PUBLIC LIBRARIES.

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TABLE II

EXPENSES OF LIBRARIES, BASIS OF STATE GRANT, 1915—concluded

TOWN	books	periodicals	binding	librarians	rent	heat	light	janitors	printing	miscellaneous	total
14 Mansfield	5.04	9.60	1.47	40.00	....	1.00	1.95	10.00	....	22.58	91.64
15 Meriden	1,521.85	....	....	2,236.68	....	410.05	400.74	....	....	1,086.25	5,655.57
16 Middlebury	4.24	34.40	....	....	....	....	....	....	....	6.60	45.24
17 Middlefield	41.43	15.00	20.50	100.00	....	45.50	.50	37.50	6.75	107.90	375.17
18 Milford	280.55	121.60	60.00	550.00	....	124.50	55.50	150.00	23.00	342.77	1,707.92
19 Morris	10.14	6.00	....	20.00	10.00	....	....	....	....	3.86	50.00
20 New Britain	6,508.80	380.05	897.48	5,234.67	....	693.98	682.00	1,026.97	75.45	2,240.28	17,838.77
21 New Canaan	....	31.95	....	419.95	....	144.93	45.48	305.00	16.50	845.94	1,809.75
22 New Fairfield	....	....	....	20.00	....	....	....	....	....	3.60	23.60
23 New Hartford	78.84	....	....	....	76.50	2.00	10.00	12.00	3.50	43.00	225.93
24 Newington	12.90	30.40	....	60.00	....	....	....	....	....	68.88	211.27
25 New Milford	758.50	80.74	113.02	828.00	....	123.67	136.70	....	....	143.70	2,184.51
26 North Canaan	43.91	16.65	....	....	....	22.34	....	11.50	....	29.37	123.77
27 North Haven	99.74	38.65	31.60	150.00	....	....	5.54	30.00	....	41.13	396.66
28 North Stonington	....	....	....	....	....	....	....	....	....	....	....
29 Norwich	1,763.70	177.91	243.75	3,634.51	....	189.75	306.92	....	....	1,386.20	7,702.92
30 Old Lyme	108.27	81.02	42.85	600.00	....	130.45	20.20	175.00	19.50	653.84	1,831.13
31 Old Saybrook	20.03	....	....	200.00	....	43.96	12.50	24.05	....	43.08	343.68
32 Orange	88.55	50.10	112.45	370.13	....	55.50	45.12	260.00	....	179.07	1,160.92
33 Plainfield	....	26.86	20.80	70.35	....	7.50	....	55.00	5.50	7.43	202.44
34 Plainville	156.33	....	....	104.00	....	....	....	....	1.50	22.38	282.21
35 Plymouth	115.04	40.00	....	111.50	....	39.01	22.77	113.70	5.15	3.40	450.66
36 Portland	125.06	....	28.02	265.00	....	....	....	....	5.52	1.55	425.15
37 Prospect	5.75	34.75	....	50.00	....	9.50	.13	....	....	2.00	102.13
38 Putnam	589.82	....	85.61	450.00	....	....	....	....	....	39.74	1,165.17
39 Roxbury	....	32.20	....	....	....	....	....	....	....	4.99	37.19
40 Salem	116.73	....	....	....	....	....	....	....	....	38.71	155.44
41 Salisbury	103.25	96.75	....	300.00	....	....	15.00	100.56	5.50	202.00	883.06
42 Saybrook	124.13	17.00	....	93.75	....	....	....	....	6.75	41.81	173.44
43 Scotland	26.00	....	....	20.00	....	....	86.75	....	....	....	52.75
44 Seymour	363.58	59.75	46.00	400.50	....	....	....	....	....	76.25	946.08
45 Somers	5.18	....	....	100.00	....	32.50	15.32	48.00	....	39.80	240.80
46 Southbury	43.78	10.40	....	....	....	7.75	....	7.70	....	31.34	100.97
47 Southington	423.43	54.50	98.29	475.00	....	111.42	51.10	120.00	....	116.70	1,450.53
48 South Windsor	79.41	....	....	40.00	....	....	....	....	....	9.00	128.41
(South Windsor public)	....	....	....	....	....	....	....	....	....	....	....
49 South Windsor (Sadd Memorial)	67.50	....	....	60.00	....	14.80	3.30	50.00	3.15	1.02	200.67
50 Stamford	1,949.28	338.68	555.28	5,905.55	....	267.03	352.20	....	1519.05	931.77	10,000.84
51 Stratford	433.14	99.60	100.28	844.84	....	108.25	126.56	120.00	15.50	173.62	2,021.70
52 Suffield	189.19	112.36	158.70	692.50	....	181.00	97.14	150.00	....	181.54	1,762.36
53 Thomaston	93.57	....	24.40	300.00	....	2100.00	....	100.00	....	1.00	618.97
54 Thompson	....	42.40	....	88.00	....	75.61	16.87	52.00	....	172.37	447.25
55 Tolland	....	....	....	100.00	....	5.50	3.50	28.40	....	4.51	146.91
56 Union	4.50	....	....	30.00	....	....	....	....	....	2.50	36.80
57 Vernon	754.35	108.55	49.07	1,793.57	....	302.99	230.78	240.00	....	252.04	3,731.20
58 Wallingford	488.42	142.35	183.20	1,104.25	....	327.62	....	452.00	....	1,134.12	3,834.96
59 Watertown	....	....	....	....	....	....	....	....	....	....	....
60 Westbrook	6.00	30.85	....	128.55	....	70.19	15.39	36.00	3.25	71.30	361.62
61 West Hartford	31.93	77.40	12.35	343.00	....	....	....	....	....	11.82	476.50
62 Westport	636.78	....	....	560.00	....	142.95	137.91	265.00	....	427.10	1,994.74
63 Wethersfield	149.35	37.55	72.25	100.00	....	21.31	18.00	44.25	....	46.92	490.23
64 Winchester	372.96	81.05	62.42	668.99	....	188.76	197.06	180.00	2.50	390.70	2,444.44
65 Windham	200.75	69.95	120.57	782.00	....	....	104.88	....	....	101.66	1,499.81
66 Windsor	45.76	692.50	....	125.00	....	39.63	11.41	52.00	....	35.40	401.70
67 Windsor Locks	121.15	79.65	66.26	300.00	300.00	....	57.36	24.00	....	54.19	1,008.61
68 Wolcott	....	....	....	....	....	....	....	....	....	....	....
69 Woodbury	92.32	....	18.09	57.50	....	7.75	9.90	6.50	....	34.82	226.88
70 Woodstock	15.73	....	....	49.50	....	82.00	....	....	....	22.14	89.17
71 Woodstock (East)	22.22	....	....	5.00	....	....	....	3.00	....	.22	30.44

29,838.62 4,071.86 5,548.11 50,292.77 1,085.00 6,739.54 5,180.90 8,206.80 1,066.45 23,266.92 136,166.97

includes light
includes suppliesc includes periodicals
d includes janitorse includes periodicals and binding
f includes a years' subscriptions

PUBLIC LIBRARIES.

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TABLE II

EXPENSES OF LIBRARIES, BASIS OF STATE GRANT, 1916—concluded

TOWN	books	periodicals	binding	librarians	rent	heat	light	janitors	printing	miscellaneous	total
55 Manchester	400.00	44.39	76.35	358.89	25.00	1.00	46.86	....	3.00	595.83	1,550.12
56 Mansfield	109.61	8.90	5.70	45.00	....	3.00	3.70	4.25	3.00	18.66	208.12
57 Meriden	C 1,204.38	....	257.78	22,320.00	....	395.66	379.67	....	....	723.09	5,281.48
58 Middlebury	47.03	38.52	....	....	....	....	....	....	....	7.20	98.76
59 Middlefield	61.98	10.00	16.20	100.00	6.00	30.00	45	38.50	3.75	81.54	348.02
60 Milford	283.63	110.07	79.16	550.00	....	104.00	47.90	150.00	30.00	588.38	1,943.14
61 Morris	7.44	12.25	....	20.00	10.00	....	....	....	....	.41	50.10
62 New Britain	4,708.09	439.44	1,044.61	5,139.42	....	340.91	559.99	1,050.00	281.59	3,121.98	16,880.03
63 New Canaan	55.69	33.80	....	330.15	....	121.99	19.14	380.00	15.00	1,125.61	2,081.38
64 New Fairfield	....	....	....	20.00	....	....	....	....	....	1.75	21.75
65 New Hartford	69.73	....	15.25	....	171.00	15.75	17.31	51.00	4.00	113.21	457.95
66 Newington	17.70	38.65	85.70	83.50	....	170.48	126.57	....	4.50	20.25	100.30
67 New Milford	467.71	84.40	69.14	832.00	....	....	....	....	....	139.71	1,883.91
68 North Canaan	117.31	17.80	....	175.00	....	27.93	....	15.35	....	57.19	410.58
69 North Haven	98.34	37.55	14.50	150.00	....	18.23	6.57	30.00	.80	14.21	370.20
70 North Stonington	171.98	51.60	80.80	400.00	....	....	....	....	....	35.00	679.38
71 Norwich	1,043.57	218.71	285.61	3,161.57	....	195.85	291.84	357.55	....	2,115.00	8,908.50
72 Old Lyme	148.17	85.36	51.65	600.00	....	120.52	22.10	175.00	4.25	329.25	1,545.30
73 Old Saybrook	20.22	....	....	212.85	....	41.88	12.35	34.47	....	41.10	304.87
74 Orange	134.91	50.20	63.77	333.29	....	7.25	44.38	265.00	....	219.79	1,218.13
75 Plainfield	....	25.10	....	78.00	....	28.15	....	50.67	6.50	70.80	268.82
76 Plainville	109.74	....	51.00	90.00	....	....	....	....	....	29.15	285.89
77 Plymouth	121.40	41.00	57.05	116.05	....	32.22	18.60	117.00	15.00	3.20	522.22
78 Portland	174.05	....	....	265.00	....	....	....	....	8.00	.53	447.58
79 Prospect	.98	38.55	....	50.00	....	....	....	....	....	24.50	114.03
80 Putnam	778.48	14.45	....	496.75	....	....	....	....	g 39.14	30.58	1,359.40
81 Roxbury	10.00	34.00	....	....	....	5.00	3.16	....	....	10.85	63.01
82 Salem	80.26	7.00	....	10.00	....	....	....	....	....	15.48	121.74
83 Salisbury	105.50	94.50	....	550.00	....	254.46	157.72	209.31	11.75	179.71	1,562.95
84 Saybrook	32.61	17.15	....	157.25	....	....	....	12.00	2.13	22.38	243.52
85 Scotland	21.50	....	....	20.00	....	3.30	....	....	....	5.00	50.00
86 Seymour	171.90	65.50	82.26	481.00	50.00	....	....	....	....	90.55	941.21
87 Somers	C 5.20	....	....	133.33	....	19.09	16.41	48.00	....	71.57	293.66
88 Southbury	40.43	11.10	....	....	....	11.75	....	9.30	....	20.81	93.39
89 Southington	242.33	58.45	126.68	527.77	....	82.25	58.70	130.00	....	253.93	1,480.11
90 South Windsor	69.53	....	....	40.00	....	....	....	....	6.25	11.42	127.20
(South Windsor public)	....	....	....	....	....	....	....	....	....	....	....
91 South Windsor	52.59	....	....	60.00	....	30.05	2.20	50.00	....	3.27	198.11
(Sadd memorial)	....	....	....	....	....	....	....	....	....	....	....
92 Stamford	1,864.43	359.52	304.43	6,041.40	....	277.72	327.16	....	b519.77	1,788.06	11,482.49
93 Stratford	492.85	115.25	118.12	963.24	....	112.50	98.68	147.50	7.50	165.01	2,212.65
94 Suffield	203.27	104.80	112.00	665.02	....	210.31	62.33	150.00	....	140.88	1,648.61
95 Thomaston	191.87	54.60	....	300.00	....	....	....	....	....	8.83	555.30
96 Thompson	32.11	46.50	31.32	88.00	....	65.15	15.70	80.00	....	234.88	593.66
97 Tolland	....	....	11.73	100.00	....	5.50	7.09	28.40	3.20	22.55	178.47
98 Union	....	....	....	30.00	....	....	....	....	....	.74	30.74
99 Vernon	668.79	131.00	102.64	1,930.46	....	149.00	231.90	240.00	....	326.26	3,781.05
100 Wallingford	548.65	159.15	168.88	1,150.47	....	401.30	....	457.00	....	847.38	3,732.83
101 Watertown	275.46	20.00	....	75.00	....	....	....	....	....	226.13	596.59
102 Westbrook	3.15	27.80	....	150.30	....	24.98	39.76	32.00	22.48	63.75	364.22
103 West Hartford	79.85	65.40	54.30	343.00	....	21.69	....	....	4.25	10.11	648.60
104 Westport	C 453.63	....	....	660.00	....	134.35	106.02	260.00	....	88.08	1,701.98
105 Wethersfield	142.23	29.75	54.80	112.50	....	25.61	18.00	48.50	....	13.35	451.74
106 Winchester	605.77	85.25	94.91	1,057.30	....	222.94	183.39	180.00	2.50	219.30	2,951.36
107 Windham	1.00	....	....	....	....	....	....	....	....	....	....
(Windham free library)	....	....	....	....	....	....	....	....	....	....	....
108 Windham	242.21	59.75	117.90	782.00	....	....	170.34	....	....	127.80	1,500.00
(Willimantic free public)	....	....	....	....	....	....	....	....	....	....	....
109 Windsor	135.59	48.50	8.45	149.77	....	39.76	9.92	58.00	....	6.16	456.15
110 Windsor Locks	49.61	72.00	117.28	300.00	300.00	....	57.61	37.88	5.65	58.73	998.76
111 Wolcott	98.38	....	....	....	....	....	....	....	2.50	13.60	114.48
112 Woodbury	34.43	19.91	....	51.50	....	11.00	18.60	6.50	....	55.92	197.86
113 Woodstock	15.65	....	....	79.00	....	1.00	1.00	....	....	20.87	117.52
114 Woodstock (East)	26.30	....	....	5.00	....	....	.12	3.00	....	.25	34.57

27,668.10 5,167.74 6,315.52 53,318.82 1,200.00 7,009.16 5,209.69 8,999.46 1,480.99 27,176.72 143,546.20

Includes light b includes supplies c includes periodicals d includes janitors g includes postage
town vote appropriating \$100.00 to the library used as basis of initial grant.

TABLE II
EXPENSES OF LIBRARIES, BASIS OF STATE GRANT, 1917

TOWN	books	periodicals	binding	librarians	rent	heat	light	janitors	printing	miscellaneous	total
1 Andover	1.00	23.40	....	30.20	....	....	3.04	....	7.55	1.00	66.11
2 Ansonia	787.74	175.60	194.58	2,066.62	....	252.11	276.52	624.00	....	900.14	5,280.31
3 Avon	43.00	....	....	26.00	36.00	....	....	....	....	105.00	145.00
4 Berlin (Berlin free)	25.08	20.30	4.45	40.00	....	11.25	6.00	12.00	....	27.00	145.08
5 Berlin (Peck Memorial)	....	9.70	....	26.00	....	17.40	6.50	27.00	....	76.65	163.25
6 Bethel	100.67	....	48.95	150.00	....	76.50	22.36	....	11.33	89.55	499.27
7 Bethlehem	3.62	17.30	....	25.00	....	....	....	2.70	....	1.44	50.06
8 Bloomfield	287.10	108.80	54.00	....	....	....	....	....	....	1.60	451.50
9 Bolton	....	....	....	35.00	....	4.50	....	....	....	5.00	44.50
10 Bridgewater	39.72	13.75	....	26.00	....	....	....	26.00	....	6.24	111.71
11 Bristol	2,059.32	296.95	370.40	3,959.37	....	418.99	382.35	431.65	g 166.64	811.08	8,877.50
12 Brooklyn	133.58	28.55	....	50.00	....	4.00	.31	24.00	1.25	2.45	244.14
13 Burlington	16.00	9.00	....	25.00	....	....	....	....	....	....	50.00
14 Canton	123.16	29.65	35.15	188.25	....	....	10.37	18.00	16.02	56.42	477.17
15 Chaplin	....	6.00	....	25.00	....	14.25	2.35	....	....	27.26	84.51
16 Cheshire	276.00	16.00	16.00	250.00	....	....	....	....	....	6.20	564.20
17 Chester	59.45	20.00	....	150.00	....	23.40	19.10	96.20	....	156.99	525.14
18 Clinton	128.69	....	....	224.00	h 138.00	....	....	....	....	93.93	584.61
19 Colchester	55.26	43.25	42.83	252.97	....	840.40	....	....	10.12	25.82	470.17
20 Columbia	81.39	19.75	....	50.00	....	9.00	1.98	....	2.80	5.85	170.77
21 Coventry	97.75	26.75	....	200.00	....	103.62	15.70	110.00	6.00	78.60	618.57
22 Cromwell	13.70	35.50	18.15	82.04	....	17.90	15.15	38.25	....	30.35	188.59
23 Danbury	1,374.83	150.85	460.97	2,687.10	....	731.73	696.35	624.00	g 189.50	3,056.10	9,951.57
24 Darien	....	....	....	180.00	240.00	81.70	33.61	....	....	45.20	580.51
25 Derby	825.11	144.70	88.01	2,443.87	....	272.75	204.81	600.00	....	500.45	5,070.74
(Derby public)	....	....	....	....	....	....	....	....	....	....	....
26 Derby (Derby Neck library)	i....	....	....	....	....	....	....	....	....	....	....
27 Durham	144.40	....	....	200.00	....	30.01	6.65	36.80	3.00	49.90	470.76
28 Eastford	25.00	8.00	....	35.00	12.00	2.65	1.00	....	....	19.62	102.27
29 East Haddam	....	60.58	40.00	300.00	....	50.00	43.25	44.00	....	68.17	462.00
30 East Hampton (East Hampton public)	110.66	70.75	....	252.10	....	....	4.85	....	10.00	111.11	590.62
31 East Hampton (Middle Haddam)	68.44	....	....	37.90	....	2.75	11.00	....	....	92.77	212.16
32 East Hartford	332.19	23.55	160.62	974.58	70.00	34.35	8.56	30.00	....	585.26	2,210.56
33 East Haven	1.50	....	....	50.00	52.00	.96	2.50	18.75	....	14.90	140.66
34 East Lyme	29.58	23.35	20.20	....	30.00	....	....	....	....	6.75	100.88
35 East Windsor (E. Windsor library association)	38.23	14.70	....	....	....	....	....	....	....	104.19	157.12
36 East Windsor (Warehouse Point)	117.97	39.33	....	110.00	....	10.00	19.58	2.70	3.00	56.06	358.84
37 Ellington	2.25	41.00	....	250.00	....	249.31	66.71	239.58	....	373.58	1,222.43
38 Enfield	257.42	95.28	126.93	783.28	....	49.85	77.26	250.00	35.75	108.70	1,544.24
39 Farmington	40.93	12.65	....	100.00	....	52.67	....	30.00	....	194.72	430.37
40 Glastonbury	277.96	....	31.54	200.00	60.00	14.60	12.74	21.01	....	90.13	707.91
41 Goshen	5.21	....	13.75	75.00	9.00	6.75	3.90	6.00	....	9.10	128.11
42 Granby	49.90	6.24	....	26.00	4.00	....	....	....	....	.40	86.54
(Granby public)	....	....	....	....	....	....	....	....	....	....	....
43 Granby (Frederick H Cossitt library)	d 18.10	28.80	....	d 70.00	....	....	....	....	....	8.00	154.90
44 Greenwich	777.84	107.32	188.35	1,806.49	....	161.00	131.33	300.00	....	370.84	3,547.78
45 Hamden	75.49	12.30	6.22	....	10.00	15.00	3.42	36.75	....	26.16	154.04
46 Hampton	j....	....	....	....	....	....	....	....	....	....	....
47 Hartford	k....	....	....	....	....	....	....	....	....	....	....
48 Harwinton	....	12.65	....	200.00	....	58.50	....	....	....	273.52	544.02
49 Hebron	....	20.20	....	41.60	....	21.64	5.23	6.40	....	14.96	111.03
50 Huntington	464.30	182.98	132.53	1,557.15	....	287.45	150.86	371.25	10.50	1,174.59	4,323.88
51 Kent	96.24	....	....	100.00	....	6.75	3.00	....	7.00	43.50	250.49
52 Killingly	420.35	68.25	39.84	529.60	....	114.75	119.51	164.05	1.75	135.59	1,291.24
53 Lebanon	18.07	16.10	....	50.00	....	2.50	....	....	....	5.77	102.44
54 Litchfield	478.34	59.55	151.60	934.57	....	159.39	73.70	180.00	....	368.80	2,152.03
55 Lyme	....	....	....	....	....	....	....	....	....	25.10	25.10
56 Madison	622.93	223.85	93.35	821.00	....	....	100.37	300.00	17.17	253.64	2,447.29
57 Manchester	360.00	54.98	56.06	385.84	....	....	44.73	....	6.25	106.17	1,007.00
58 Mansfield	44.81	15.69	4.38	66.00	....	20.25	4.81	4.50	1.50	52.62	144.06
59 Meriden	781.23	186.10	188.07	1,872.50	....	164.39	413.77	500.00	....	978.10	5,000.00
60 Middlebury	13.44	37.00	....	....	....	....	....	....	....	6.12	56.56
61 Middlefield	34.00	15.00	....	100.00	....	35.86	1.00	32.50	1.75	101.27	201.48
62 Middletown	l....	....	....	....	....	....	....	....	....	....	....
63 Milford	198.66	100.00	40.00	575.00	....	79.00	48.00	150.00	11.00	153.00	1,254.66
64 Morris	....	8.70	....	20.00	10.00	....	....	....	....	.50	39.20

a includes light c includes periodicals d includes janitors g includes postage h includes heat and light
i statement of amount appropriated to the library by the city board of apportionment and taxes
accepted as basis of initial grant.

j failed to comply with conditions and received no grant

k action of city board of finance appropriating \$28,000.00 to the library accepted as basis of initial grant

l town appropriation \$1,500.00 to the library accepted as basis of initial grant

PUBLIC LIBRARIES.

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TABLE II

EXPENSES OF LIBRARIES, BASIS OF STATE GRANT, 1917 — *concluded*

TOWN	books	periodicals	binding	librarians	rent	heat	light	janitors	printing	miscellaneous	total
65 New Britain	5,436.57	450.04	1,125.83	5,504.55	....	669.10	608.82	1,117.43	54.55	3,279.23	18,800.12
66 New Canaan	193.30	37.55	....	557.40	....	147.30	55.92	300.00	21.85	119.63	1,492.95
67 New Fairfield	....	....	....	80.00	....	....	....	....	....	11.35	31.35
68 New Hartford	43.30	....	....	....	100.00	13.50	13.03	50.00	....	25.30	245.13
69 Newington	....	40.90	....	96.00	....	....	....	....	....	....	136.90
70 New Milford	634.79	92.40	....	530.00	....	190.50	115.55	318.00	....	429.47	2,310.71
71 North Canaan	81.11	18.35	....	175.00	....	9.44	12.00	15.50	....	73.50	324.00
72 North Haven	96.21	36.11	16.80	190.00	....	....	6.66	30.00	....	8.05	343.83
73 North Stonington	93.66	54.90	....	400.00	....	....	....	....	....	105.14	653.70
74 Norwich	2,109.36	245.19	386.83	3,709.20	....	319.20	285.15	....	....	1,151.91	8,806.93
75 Old Lyme	177.95	76.85	41.20	775.00	....	107.12	23.62	....	70.80	465.01	1,737.55
76 Old Saybrook	36.44	....	24.00	203.85	....	41.87	12.60	28.47	....	123.10	470.42
77 Orange	122.10	48.50	32.15	361.51	....	99.75	38.27	275.00	....	274.72	1,246.00
78 Plainfield	20.32	26.65	....	88.56	....	19.10	....	39.00	5.00	106.20	304.83
79 Plainville	82.71	....	....	104.00	....	....	....	....	....	18.85	205.56
80 Plymouth	65.38	41.00	....	120.60	....	124.51	15.48	117.00	....	64.96	557.93
81 Portland	91.00	....	32.46	265.00	....	....	....	....	1.50	2.00	391.96
82 Prospect	98	38.55	....	56.00	....	....	....	....	....	24.50	114.03
83 Putnam	587.60	44.85	27.63	512.73	....	....	....	....	116.51	16.64	1,206.05
84 Roxbury	....	30.65	....	....	....	5.00	611.80	....	....	....	47.45
85 Salem	147.28	7.00	....	10.00	....	3.00	....	....	....	1.25	168.53
86 Salisbury	100.05	99.95	63.12	664.20	....	221.29	144.42	215.30	21.86	108.44	1,693.53
87 Saybrook	1.13	28.95	57.43	122.00	....	....	....	13.00	....	87.44	311.95
88 Scotland	....	....	15.00	20.00	....	10.00	....	....	....	6.60	51.60
89 Seymour	217.04	69.35	94.88	668.00	....	73.33	38.99	185.67	....	201.98	1,549.24
90 Somers	1.25	5.40	....	150.00	....	22.76	15.90	48.00	....	64.09	313.40
91 Southbury	29.07	8.35	....	....	....	14.40	....	5.80	....	5.01	62.63
92 Southington	261.31	60.20	68.06	475.00	....	141.25	55.40	120.00	....	242.48	1,423.70
93 South Windsor	88.85	....	....	40.00	....	....	....	....	....	11.56	140.41
(South Windsor public)	....	....	....	....	....	....	....	....	....	....	....
94 South Windsor (Sadd Memorial)	81.00	....	3.97	43.80	....	....	....	....	....	2.99	133.01
95 Stamford	2,512.10	349.72	353.80	6,534.55	....	220.93	395.85	....	1,449.60	1,169.86	12,046.50
96 Stratford	462.21	124.46	139.50	942.35	....	108.50	103.86	150.00	14.10	222.73	2,273.71
97 Suffield	354.10	110.15	140.08	779.02	....	....	66.65	162.50	....	164.87	1,773.37
98 Thomaston	67.05	....	48.00	300.00	....	2100.00	....	100.00	....	5.00	617.05
99 Thompson	78.94	54.75	....	125.00	....	79.88	18.30	76.00	7.75	170.25	610.87
100 Tolland	....	....	49.89	100.00	....	5.50	2.80	28.10	3.40	2.11	191.80
101 Union	....	....	....	35.49	....	....	....	4.00	....	....	39.49
102 Vernon	673.55	126.85	124.97	1,983.16	....	264.70	275.31	240.00	....	924.15	4,512.69
103 Wallingford	703.77	155.20	178.72	1,232.26	....	327.70	....	485.04	....	439.68	3,580.27
104 Watertown	75.49	45.70	....	125.00	....	....	....	....	....	7.51	253.70
105 Westbrook	1.25	37.50	....	161.85	....	37.53	93.79	36.00	8.05	77.67	453.64
106 West Hartford	76.66	75.75	....	312.00	....	2110.04	....	....	7.15	12.45	606.05
107 Westport	201.51	88.25	....	729.50	....	276.34	95.85	275.00	....	89.11	1,745.56
108 Wetherfield	115.55	33.75	45.80	150.00	....	41.80	18.00	43.25	....	31.62	479.77
109 Winchester	459.73	131.35	107.23	929.53	....	....	122.29	200.10	....	272.51	2,292.74
110 Windham	129.22	5.75	....	15.00	....	32.44	5.00	46.50	....	37.97	272.48
(Windham free public)	....	....	....	....	....	....	....	....	....	....	....
111 Windham (Williamantic public)	438.37	63.30	74.63	600.00	....	....	150.65	....	....	74.34	1,401.20
112 Windsor	81.70	63.00	....	147.58	....	41.98	10.56	61.00	4.81	5.26	415.89
113 Windsor Locks	80.49	79.62	38.81	300.00	300.00	....	39.46	13.00	2.00	52.39	905.77
114 Wolcott	1.00	....	....	....	....	....	....	....	....	....	....
115 Woodbury	67.56	....	....	30.00	....	11.00	18.00	6.50	11.58	....	164.64
116 Woodstock	9.00	....	24.32	77.00	....	1.00	1.00	....	1.89	10.12	124.33
117 Woodstock (East)	25.00	....	....	5.00	....	....	....	....	....	10	30.10

29,911.37 5,863.39 5,999.13 57,203.81 1,071.00 7,427.60 5,963.21 20,223.25 1,223.53 22,227.40 147,763.69

a includes light

b includes supplies

d includes janitors

j failed to comply with conditions and received no grant

TABLE II
EXPENSES OF LIBRARIES, BASIS OF STATE GRANT, 1918

TOWN	books	periodicals	binding	librarians	rent	heat	light	janitors	printing	miscellaneous	total
1 Andover	....	27.80	6.53	18.75	....	12.00	....	....	....	2.50	67.58
2 Ansonia	902.70	185.13	298.77	1,840.72	....	427.19	245.65	624.00	....	1,094.05	5,610.11
3 Avon	40.00	....	....	26.50	36.00	.84	....	....	....	3.33	106.66
4 Berlin (Berlin free)	38.08	24.75	....	37.00	....	10.50	6.00	12.00	1.15	71.75	201.23
5 Berlin (Peck Memorial)	....	8.50	....	38.00	....	22.65	3.50	31.00	....	28.75	132.20
6 Bethel	109.90	....	29.49	162.50	....	79.00	20.22	....	20.00	95.14	516.25
7 Bethlehem	4.89	22.50	....	25.00	....	....	....	2.60	....	.76	55.75
8 Bloomfield	273.04	126.30	....	240.00	....	....	....	....	....	100.00	739.34
9 Bolton	21.33	....	....	52.00	....	....	2.90	....	....	....	76.23
10 Bridgewater	....	14.00	....	26.00	....	....	....	26.00	....	78.94	144.94
11 Bristol	1,608.26	356.68	508.89	4,126.37	....	458.31	380.63	525.00	2,278.30	696.55	8,938.00
12 Brooklyn	125.07	26.50	....	50.00	....	6.00	.47	24.00	....	64.99	266.33
13 Burlington	....	9.00	....	25.00	....	....	....	....	....	10.20	44.20
14 Canton	71.55	27.20	22.15	121.50	....	....	11.13	12.00	612.31	11.60	355.44
15 Chaplin	....	6.00	....	25.00	....	64.46	....	....	....	5.10	40.56
16 Cheshire	222.69	12.00	14.40	205.00	....	....	....	....	7.00	75.25	632.34
17 Chester	82.66	16.15	....	150.00	....	56.70	20.25	90.00	2.62	86.21	504.59
18 Clinton	262.03	....	....	106.00	2132.60	....	....	....	....	99.16	689.70
19 Colchester	156.20	41.40	66.79	177.36	....	175.27	100.00	200.00	641.41	141.22	899.71
20 Columbia	82.48	19.75	....	62.50	....	18.50	1.98	....	3.20	113.69	302.00
21 Coventry	88.90	58.00	....	200.04	....	244.00	19.20	120.00	10.00	172.40	912.50
22 Cromwell	35.05	35.75	....	118.00	....	21.55	11.23	35.25	1.75	55.17	313.75
23 Danbury	1,659.31	156.35	471.20	3,128.87	37.00	953.25	377.81	741.01	2,64.84	4,227.28	11,826.24
24 Darien	....	....	127.50	220.00	....	92.01	38.70	....	2.75	120.70	551.00
25 Derby	804.99	165.50	236.11	2,375.57	....	223.71	143.41	600.00	....	464.57	5,073.89
(Derby public)											
26 Derby (Derby Neck library)	607.19	....	50.20	....	....	25.95	2.80	42.00	22.10	229.13	928.37
27 Durham	92.65	....	....	225.00	....	....	4.80	35.00	5.00	....	362.45
28 Eastford	....	9.25	....	20.00	12.00	....	1.14	....	....	20.93	53.32
29 East Haddam	....	72.85	40.03	300.00	....	65.15	46.50	44.00	....	71.47	620.70
30 East Hampton (East Hampton public)	118.66	3.00	....	223.10	....	3.75	12.65	....	....	57.59	412.75
31 East Hampton (Middle Haddam)	77.26	....	....	34.30	....	6.00	12.00	....	....	5.74	135.30
32 East Hartford	198.76	....	138.84	933.39	120.00	32.45	12.50	120.00	12.00	134.42	1,268.77
33 East Haven	25.33	4.00	....	50.00	99.00	....	6.08	24.25	7.75	23.44	229.85
34 East Lyme	49.26	44.90	....	....	30.00	....	....	....	....	34.83	158.99
35 East Windsor (E Windsor libra- ry association)	136.90	....	....	....	....	....	....	....	....	3.25	140.15
36 East Windsor (Warehouse Point)	72.41	36.84	1.50	120.00	....	10.00	11.25	....	....	41.68	222.68
37 Ellington	....	43.40	....	220.25	....	253.97	60.80	200.75	....	96.51	895.68
38 Enfield	435.61	84.40	60.05	862.00	....	131.60	94.37	266.28	3.75	255.02	2,223.28
39 Farmington	100.95	24.15	....	100.00	....	80.86	21.73	120.00	....	72.14	1,154.83
40 Glastonbury	247.68	....	53.38	200.00	60.00	30.50	21.95	12.63	5.05	68.80	705.94
41 Goshen	10.74	....	....	100.00	....	6.00	3.40	5.00	....	2.30	127.44
42 Granby	25.79	10.15	....	26.00	....	....	....	....	....	25.12	87.06
(Granby public)											
43 Granby (Frederick H Cossitt library)	8.35	45.55	....	70.00	....	8.00	1.95	....	....	16.30	150.15
44 Greenwich	906.20	117.55	99.97	1,286.91	....	280.40	123.21	300.00	22.75	522.36	4,250.77
45 Hamden	7.00	....	....	....	....	....	....	....	....	....	....
46 Hampton	....	....	....	....	....	....	....	....	....	....	....
47 Hartford	8,496.73	1,197.87	2,207.40	12,286.07	....	....	....	....	....	2,227.54	33,155.21
48 Harwinton	139.41	53.25	37.95	200.00	....	73.00	....	....	....	202.60	712.21
49 Hebron	....	27.28	....	51.60	....	10.00	3.48	6.85	....	1.98	101.11
50 Huntington	687.37	41.53	120.46	1,094.00	....	362.28	155.08	360.00	....	992.33	4,304.24
51 Kent	112.84	....	....	100.00	....	8.00	3.00	....	....	3.99	226.22
52 Killingly	397.38	90.75	79.50	531.00	....	97.00	105.43	159.95	12.10	106.17	1,075.12
53 Lebanon	21.91	....	....	50.00	....	8.00	1.05	4.70	....	48.19	86.54
54 Litchfield	531.84	65.45	105.99	896.40	....	177.06	62.05	180.00	....	12.25	1,665.99
55 Lyme	20.25	25.00	....	....	....	....	5.00	....	....	....	....
56 Madison	617.86	219.73	140.02	843.08	....	364.92	109.42	300.00	29.00	252.23	2,888.77
57 Manchester	....	56.32	69.97	432.18	....	....	44.72	....	....	12.23	1,090.20
58 Mansfield	45.91	27.94	20.51	72.00	....	....	....	....	....	14.50	200.20
59 Meriden	1,284.31	173.00	144.92	1,995.00	....	433.01	344.77	500.00	....	1,009.59	5,864.62
60 Middlebury	37.07	45.85	....	....	....	....	....	....	....	....	82.92

a includes light

b includes supplies

c includes periodicals

g includes postage

d includes heat and light

f failed to comply with necessary conditions and received no grant

h town vote appropriating \$200.00 per annum as basis of public library

PUBLIC LIBRARIES.

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TABLE II

EXPENSES OF LIBRARIES, STATE GRANT, 1918 — *concluded*

TOWN	books	periodicals	binding	librarians	rent	heat	light	janitors	printing	miscellaneous	total
1 Middlefield	40.61	17.00	59.00	190.50	....	57.10	17.77	29.00	....	425.51	836.49
2 Middletown	640.65	60.19	213.15	1,522.74	....	515.86	142.95	227.58	....	424.92	3,173.04
3 Milford	140.00	76.00	....	750.00	....	119.00	45.00	150.00	2.00	150.00	1,387.00
4 Morris	....	11.25	....	20.00	10.00	....	....	....	....	90.00	61.25
5 New Britain	5,052.89	476.45	1,254.19	6,383.23	....	519.60	602.94	1,109.75	83.45	2,144.45	17,627.95
6 New Canaan	290.98	34.20	....	581.10	....	193.47	68.94	360.00	1.75	907.97	2,438.41
7 New Fairfield	....	....	....	20.00	....	....	....	....	....	....	20.00
8 New Hartford	....	....	....	....	....	....	14.92	65.00	....	156.30	236.22
9 Newington	....	38.40	10.00	96.00	....	....	....	....	....	30.87	175.27
10 New Milford	c 899.19	....	....	590.00	....	225.00	109.35	312.00	....	150.00	2,210.44
11 North Canaan	52.89	17.10	....	175.00	....	d 30.98	....	17.00	....	42.59	335.56
12 North Haven	100.64	35.40	17.25	150.00	....	....	6.77	30.00	5.75	14.00	359.81
13 North Stonington	93.66	54.90	....	400.00	....	....	....	....	....	105.14	653.70
14 Norwich	2,092.70	303.62	404.14	3,583.97	....	10.50	305.17	366.00	186.75	965.74	8,220.59
15 Old Lyme	213.36	84.40	34.00	700.00	....	159.11	28.18	175.00	....	244.40	1,638.45
16 Old Saybrook	19.48	....	11.44	215.26	....	7.50	12.30	28.00	....	104.97	458.95
17 Orange	67.65	83.65	115.95	367.16	....	149.45	53.48	250.00	2.25	573.39	1,662.98
18 Plainfield (Plainfield library association)	....	....	....	....	....	....	....	....	....	....	....
19 Plainfield (Aldrich free public)	6.26	25.00	....	96.50	....	52.25	....	52.00	5.25	15.07	252.33
20 Plainville	112.70	....	....	104.00	....	....	....	....	1.69	12.40	237.79
21 Plymouth	96.88	40.00	....	140.60	....	....	22.55	117.00	4.00	74.28	495.31
22 Portland	132.34	....	33.74	265.00	....	....	....	....	24.86	2.50	458.44
23 Prospect	1.50	45.65	....	50.00	....	75	15	....	....	54.40	152.45
24 Putnam	216.43	47.30	118.43	518.11	....	....	....	....	....	45.89	946.16
25 Roxbury	....	33.75	....	....	....	....	....	....	....	16.17	49.92
26 Salem	31.87	....	....	10.00	18.00	7.00	....	....	....	10.15	77.02
27 Salisbury	122.75	87.25	....	489.20	....	316.91	151.07	305.40	....	315.85	1,778.43
28 Saybrook	179.55	6.00	....	109.25	....	....	....	....	1.75	19.37	315.92
29 Scotland	11.80	....	....	20.00	....	6.50	2.00	....	....	17.25	57.55
30 Seymour	211.20	78.25	103.37	933.00	....	238.00	113.38	329.50	....	845.76	2,552.46
31 Somers	....	5.90	....	150.00	....	65.94	14.44	48.00	....	39.42	323.70
32 Southbury	33.55	9.75	....	....	....	....	3.66	7.00	....	21.20	75.16
33 Southington	271.18	59.25	75.98	475.00	....	107.00	59.30	123.75	9.40	191.92	1,372.78
34 South Windsor (South Windsor public)	92.68	....	6.00	40.00	....	....	....	....	....	9.00	147.68
35 South Windsor (Sadd memorial)	86.10	....	2.32	40.00	....	....	....	....	5.40	8.95	142.77
36 Stamford	a 2,620.83	468.79	294.25	d 7,458.92	....	517.61	436.41	....	b 532.26	1,241.67	13,570.74
37 Stratford	586.31	135.78	128.62	1,012.00	....	120.00	116.17	150.00	22.34	403.04	2,674.26
38 Suffield	247.63	117.65	55.94	640.40	....	226.23	64.50	188.00	9.90	243.00	1,799.31
39 Thomaston	370.75	....	36.00	300.00	....	....	....	....	....	8.32	715.07
40 Thompson	35.05	56.00	32.40	125.00	....	83.40	14.25	76.00	....	133.59	555.69
41 Tolland	....	....	13.16	200.00	....	....	....	28.25	....	8.43	149.84
42 Union	....	....	....	30.00	....	....	....	....	....	51.27	81.27
43 Vernon	606.73	107.20	173.07	a 1,180.51	....	359.54	275.52	285.00	....	320.47	4,449.94
44 Wallingford	537.77	162.80	192.54	1,452.20	....	551.95	....	547.75	....	532.97	3,977.97
45 Watertown	82.25	21.35	....	100.00	....	....	....	....	....	3.87	207.47
46 Westbrook	54	39.50	....	184.65	....	64.62	24.05	42.50	2.95	70.59	429.40
47 West Hartford	64.18	81.83	85.70	903.95	....	e 400.61	....	189.35	135.94	374.03	2,237.59
48 Westport	c 447.46	....	....	860.75	....	180.61	182.90	250.00	....	191.90	2,113.62
49 Wethersfield	165.30	46.25	....	150.00	....	45.35	18.00	50.00	....	18.56	493.46
50 Winchester	386.59	126.50	134.20	1,038.10	....	336.89	164.11	166.00	....	440.22	2,792.61
51 Windham (Windham free library)	29.22	5.75	....	15.00	....	32.44	5.00	46.50	....	37.97	172.48
52 Windham (Willimantic free public)	205.81	64.47	92.85	860.00	....	....	131.37	....	....	145.48	1,409.98
53 Windsor	62.42	53.75	22.80	166.75	....	42.63	10.00	65.08	4.60	36.13	464.16
54 Windsor Locks	84.95	79.68	42.06	300.00	300.00	....	37.16	11.25	5.96	47.81	908.87
55 Wolcott	....	....	....	....	....	....	....	....	....	....	....
56 Woodbury	57.83	....	18.70	50.00	....	7.00	18.00	6.50	....	10.34	168.37
57 Woodstock	....	1.00	....	85.00	....	1.00	1.00	....	3.00	9.66	100.66
58 Woodstock (East)	....	2.50	....	5.00	....	....	....	5.00	....	.20	12.70

40 410.46 7,227.25 8,815.37 81,694.23 1,074.60 10,913.37 6,035.28 11,845.93 1,636.08 28,612.19 198,250.76

includes light b includes supplies c includes periodicals d includes janitors e town vote appropriating as reported on basis of initial grant f town vote appropriating as reported on basis of initial grant

PUBLIC LIBRARIES.

TABLE III — SUMMARY 1918

town	population	grand list	town appropriation	state grant	percentage appropriated for library purposes on basis of grand list	expenditure per individual in population	number of volumes	circulation	circulation per 100 volumes	circulation per individual in population
1 Andover	371	25,360	50.00	67.58	.000197	\$.182				7
2 Ansonia	15,152	14,651,999	4,500.00	100.00	.000307	.37	19,712	56,614	287	3.7
3 Ashford	668	385,117				.179	4,884			
4 Avon	1,337	1,407,506	100.00		.000071	.079	2,060	2,471	119	1.8
5 Berlin	3,728	2,537,666	50.00	50.00						
6 Berlin			50.00	50.00	.000039	.089	2,903	1,980	68	
7 Berlin										
8 Bethel	3,792	2,068,163	400.00	100.00	.000193	.136	4,466	15,932	356	4.2
9 Bethlehem	550	632,309	50.00	57.40	.000079	.101	2,354	2,352	99	4.2
10 Bloomfield	1,821	2,636,412	rpt.incpt	100.00			5,457	13,972	256	7.6
11 Bolton	433	334,280	50.00	50.00	.000149	.176	1,328	2,047	154	4.7
12 Branford	6,047	4,613,884				2,569	36,878	74,892	205	12.3
13 Bridgeport	102,054	219,481,235	48,808.77		.000222	.388	72,837	197,196	270	1.9
14 Bridgewater	800	363,671	100.00	100.00	.000274	.241	2,035	2,850	108	4.7
15 Bristol	13,502	21,129,576	6,000.00	100.00	.000283	.061	35,863	111,210	310	8.2
16 Brooklyn	1,858	1,276,368	100.00	100.00	.000078	.159	5,637	6,295	111	3.3
17 Burlington	1,319	572,295	50.00	44.29	.000081	.038	1,684	720	42	5
18 Canaan	702	857,325					4,009	1,268	27	1.8
19 Canton	2,732	2,169,194	200.00	100.00	.000092	.13	2,640	13,873	525	5
20 Canton										
21 Chaplin	435	244,617	50.00	89.64	.000204	.093	1,737	988	50	2.2
22 Cheshire	1,988	3,167,391	100.00	100.00	.000031	.318	7,008	10,669	152	5.3
23 Chester	1,419	1,094,575	550.00	100.00	.000502	.355	5,756	8,262	108	5.9
24 Clinton	1,274	1,557,183	200.00	100.00	.000128	.541	4,068	7,164	176	5.6
25 Colchester	2,140	930,288	300.00	100.00	.000322	.42	6,326	10,772	170	4.4
26 Columbia	646	465,227	25.00	100.00	.000053	.467	6,950	2,741	39	4.1
27 Cornwall	1,016	780,657								
28 Cornwall										
29 Coventry	1,606	933,691	100.00	100.00	.000107	.59	4,789	7,496	156	4.6
30 Coventry							905			
31 Coventry							1,744			
32 Cromwell	2,188	1,331,531	100.00	100.00	.000075	.143	3,810	4,836	126	2.2
33 Danbury	23,502	13,360,472	4,500.00	100.00	.000411	.502	24,775	104,585	422	4.4
34 Darien	3,946	7,264,374	500.00	100.00	.000068	.139	6,108	7,364	120	1.4
35 Derby	8,991	8,586,609	4,000.00	100.00	.000588	.673	21,126	58,544	277	9.5
36 Derby			1,050.00	100.00			16,326	18,679	111	
37 Durham	997	645,670	200.00	100.00	.000309	.363	6,440			
38 Eastford	513	245,899	35.00	53.32	.000142	.103	2,931	1,220	41	2.3
39 East Haddam	2,422	1,077,001	300.00	100.00	.000278	.264	7,949	10,249	131	4.2
40 East Hampton	2,390	2,471,996	400.00	100.00	.000202	.231	6,756	8,693	128	4.4
41 East Hampton			100.00	100.00			3,376	2,381	70	
42 East Hartford	8,138	8,211,869	1,600.00	100.00	.000194	.209	10,335	19,734	199	2.4
43 East Haven	1,795	4,518,802	200.00	100.00	.000044	.133	2,172	5,884	270	3.3
44 East Lyme	1,963	2,605,610	100.00	100.00	.000038	.08	3,257	5,351	164	2.2
45 East Windsor	3,362	3,470,895	100.00	100.00	.000057	.129	4,248	5,033	118	2.3
46 East Windsor			100.00	100.00			2,610	5,314	203	
47 Ellington	1,999	1,283,495	650.00	100.00	.000506	.448	6,480	6,092	92	3.2
48 Enfield	9,719	8,771,544	2,000.00	100.00	.000228	.236	7,768	22,868	307	2.3
49 Essex	2,745	2,697,765					*2,400			
50 Essex							3,470			
51 Fairfield	6,134	9,792,035				1.67	9,543	28,427	297	6
52 Fairfield							41,911	11,650	27	
53 Farmington	3,478	4,517,565			.000166	.502	8,501	9,244	106	6
54 Farmington			750.00	100.00			3,272	12,908	397	
55 Glastonbury	4,796	4,098,905	700.00	100.00	.00017	.147	5,726	10,276	179	2.3
56 Goshen	875	595,796	100.00	100.00	.000167	.188	4,042	5,464	135	3.3
57 Granby	1,383	885,474		100.00	.000225	.171	2,118	3,090	145	3.3
58 Granby			100.00	100.00			8,990	2,310	35	
59 Greenwich	16,483	48,358,574	2,000.00	100.00	.000041	.259	10,518	32,091	305	2.3
60 Greenwich							2,941	8,193	312	
61 Griswold	4,283	2,549,318				.123	4,398	4,008	93	
62 Groton	6,495	6,283,921					7,221			
63 Groton							7,380	4,096	55	
64 Groton							1,169			
65 Guilford	3,001	2,300,699				.016	2,600			
66 Haddam	1,958	1,127,894				.422	4,268	2,675	62	1
67 Hamden	8,850	12,443,468	50.00	50.00	.000004		2,927	4,439	117	
68 Hampton	583	463,422	no report				3,945			
69 Hartford	98,916	182,061,877	28,000.00	100.00	.000184	.334	*133,639	237,554	177	1

* Approximate.

PUBLIC LIBRARIES.

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TABLE III — SUMMARY — *continued*

town	population	grand list	town appropriation	state grant	percentage appropriated for library purposes on basis of grand list	expenditure per individual in population	number of volumes	circulation	circulation per 100 volumes	circulation per individual in population
70 Hartford							96,381			
71 Harwinton	1,440	865,981		100.00		495	2,938	1,469	50	1.
72 Hebron	6,844	505,385	100.00	100.00	.000197	113	4,286	3,031	70	3.3
73 Huntington	6,645	10,511,485	2,500.00	100.00	.000237	657	16,419			
74 Kent	1,122	695,960		100.00		228	535	3,034	585	2.7
75 Killingly	6,684	4,795,453	1,607.55	100.00	.000314	255	11,800	25,379	218	3.8
76 Lebanon	1,528	1,041,169	100.00	85.66	.000096	666	4,009			
77 Ledyard	1,079	511,785								
78 Litchfield	3,006	5,318,587	200.00	100.00	.000087	865	14,200	21,686	152	7.2
79 Litchfield										
80 Lyme	746	584,879	1.00	38.85	.000001	691	3,075	1,728	56	2.1
81 Madison	1,534	2,744,435	100.00	100.00	.000036	2,044	10,327	16,535	160	10.9
82 Madison							2,714	308	11	
83 Manchester	13,641	23,722,256	1,000.00	100.00	.000042	682	5,574	15,581	279	1.1
84 Manchester										
85 Mansfield	1,977	1,080,610	100.00	100.00	.000092	103	1,849	4,256	230	2.1
86 Meriden	32,066	25,490,592	5,000.00	100.00	.000196	182	25,671	32,228	125	1.
87 Middlebury	836	1,006,730	25.00	73.04	.000024	699	2,417	533	22	.6
88 Middlefield	1,036	846,199		100.00	.000118	807	7,000	2,758	39	2.6
89 Middletown	20,749	16,225,415	2,500.00	100.00	.000154	18	*20,000	36,878	184	1.7
90 Milford	4,366	12,503,018	1,000.00	100.00	.000079	817	13,895	20,410	146	4.6
91 Montville	2,804	2,672,437				357	6,372	4,546	71	1.6
92 Morris	681	774,815	50.00	50.00	.000064	163	2,841			
93 Naugatuck	12,722	12,227,184				321	14,187	29,851	210	2.3
94 New Britain	43,918	52,001,654	15,000.00	100.00	.000288	433	*67,000	203,723	304	4.6
95 New Canaan	3,667	6,375,064	1,000.00	100.00	.000156	664	10,712	10,405	97	2.8
96 New Fairfield	551	517,433	50.00	50.00	.000096	636	1,265	929	73	1.6
97 New Hartford	2,144	2,245,026	350.00	100.00	.000155	11	4,269	4,050	94	1.8
98 New Haven	133,605	183,940,924	47,500.00		.000258	503	*139,000	535,127	384	4.5
99 New Haven							3,037	42,906		
100 New Haven							28,034	35,095	125	
101 Newington	1,689	1,974,971	150.00	100.00	.000075	135	3,669	3,556	105	2.2
102 New London	19,659	29,382,631					38,503	87,081	228	4.4
103 New Milford	5,010	2,654,581	900.00	100.00	.000339	442	11,436	31,235	273	6.2
104 New Milford										
105 Newtown	3,012	2,158,152					5,375	9,800	182	4.4
106 Newtown							2,519	2,696	107	
107 Norfolk	1,541	3,551,392					20,454	15,093	73	9.7
108 North Canaan	2,171	1,566,798	200.00	100.00	.000127	154	4,880	6,318	129	2.9
109 North Haven	2,254	2,428,358	200.00		.000082	159	5,766	7,127	123	3.1
110 North Stonington	1,100	517,773		100.00			*5,800	6,331	109	5.7
111 Norwalk	24,211	25,569,650	4,200.00		.00032	342	13,323	41,293	309	3.
112 Norwalk			4,000.00				13,446	30,220	225	
113 Norwalk							3,282	2,248	68	
114 Norwalk							1,117			
115 Norwich	26,219	19,208,535	4,500.00	100.00	.000234	859	44,435	114,106	256	4.
116 Old Lyme	1,181	1,351,448	100.00	100.00	.000073	1,387	8,221	8,288	100	7.
117 Old Saybrook	1,516	1,417,337	250.00	100.00	.000176	302	*7,700	5,261	68	3.4
118 Orange	11,272	16,332,825	1,000.00	100.00	.000612		4,041	19,558	484	1.7
119 Oxford	1,020	842,230								
120 Plainfield	6,719	4,020,632	100.00	100.00	.000024	637		5,256		7.
121 Plainfield				100.00						
122 Plainville	2,882	2,981,428	200.00	100.00	.000067	682	3,612	6,328	175	2.1
123 Plymouth	5,021	3,814,680	250.00	100.00	.000065	135	4,481	10,311	230	2.
124 Plymouth							4,040			
25 Pomfret	1,887	1,663,714				127	7,667			
26 Pomfret										
27 Portland	3,425	2,890,522	300.00	100.00	.000108	133	6,366	10,060	168	2.9
28 Preston	1,917	637,123					1,896	746	39	3.
29 Prospect	539	328,280	100.00	100.00	.000304	282	2,762	3,650	132	6.7
30 Putnam	7,280	5,061,759	1,200.00	100.00	.000237	129	7,120	15,545	218	2.1
31 Redding	1,617	1,808,492				266	5,549	836	15	5.
32 Ridgefield	3,118	5,139,674				644	10,059	12,119	120	3.8
33 Rocky Hill	1,187	987,936				10	1,973			
34 Roxbury	837	624,944	50.00	50.00	.00008	659	2,611	1,249	47	1.4
35 Salem	443	314,736	25.00	100.00	.000079	173	1,013	1,595	167	3.3
36 Salisbury	3,622	3,448,525	200.00	100.00	.000057	504	11,739	10,737	91	8.
37 Saybrook	1,907	1,553,048	250.00	100.00	.00016	164	3,965	6,473	163	3.3
38 Scotland	476	283,196	25.00	57.55	.000107	12	2,580	1,536	60	3.2

* Approximate.

TABLE III — SUMMARY — *concluded*

town	population	grand list	town appropriation	state grant	percentage appropriated for library purposes on basis of grand list	expenditure per individual in population	number of volumes	circulation	circulation per 100 volumes	circulation per individual in population
139 Seymour	4,786	4,854,946	100.00	100.00	.000002	\$.596	7,806	20,802	266	4.3
140 Sharon	1,880	2,489,621				.68	7,870	6,583	83	3.6
141 Sharon							1,887	252	13	
142 Sherman	560	350,337								
143 Simsbury	2,537	5,150,073					12,226	7,310	59	2.8
144 Somers	1,653	1,050,258	353.77	100.00	.000336	.195	4,025	2,839	70	1.7
145 Southbury	1,233	817,844	50.00	75.16	.000081	.06	3,145	2,197	69	1.7
146 Southington	6,516	6,486,617	1,200.00	100.00	.000184	.21	7,931	17,363	218	2.6
147 South Windsor	2,251	3,851,840	150.00	100.00	.000077	.129	4,070	7,587	186	4.9
148 South Windsor			150.00	100.00			2,748	3,613	131	
149 Stafford	5,233	4,216,926					6,636	17,736	266	3.3
150 Stamford	28,836	49,350,225	13,000.00	100.00	.000263	.47	32,622	139,647	424	5.
151 Stamford							2,486	6,060	243	
152 Stonington	9,154	6,662,228					7,492			
153 Stratford	5,712	11,795,756	1,800.00	100.00	.000152	.468	17,622	27,007	153	4.7
154 Suffield	3,841	6,046,020	1,200.00	100.00	.000198	.468	19,563	11,826	61	3.1
155 Thomaston	3,833	3,031,610	300.00	100.00	.000098	.202	6,652	14,944	224	4.2
156 Thompson	4,804	2,527,963	150.00	100.00	.000059	.122	4,868	7,130	146	1.5
157 Thompson							2,243	474	21	
158 Tolland	1,126	596,555	100.00	100.00	.000167	.133	2,971	2,590	87	2.3
159 Torrington	16,840	19,835,910				.439		95,635		5.6
160 Union	322	191,620	125.00		.000652	.262	3,600	960	23	2.9
161 Vernon	9,087	7,437,419	500.00	100.00	.000067	.489	13,376	50,690	378	5.5
162 Wallingford	11,155	11,236,623	2,036.73	100.00	.000181	.367	14,036	45,425	323	4.
163 Warren	412	372,462					933	933	100	2.2
164 Washington	1,747	2,737,881					5,969	7,833	130	4.3
165 Waterbury	73,141	112,724,603					103,624	263,111	253	3.5
166 Watertown	3,850	4,828,336			.00002	.572	9,736	12,753	130	5.6
167 Watertown			100.00	100.00			1,233	9,130	740	
168 Westbrook	951	1,122,887	250.00	100.00	.000222	.451	4,956	8,144	103	5.4
169 West Hartford	4,808	12,102,989	2,275.00	100.00	.000187	.465	5,497	8,988	163	1.9
170 Westport	4,259	7,599,523	1,500.00	100.00	.000197	.496	9,525	33,966	356	7.9
171 Wethersfield	3,148	2,814,087	400.00	100.00	.000142	.156	7,223			
172 Wilton	1,706	1,771,095				.072	2,345	*1,900	81	1.1
173 Winchester	8,679	8,604,781	1,500.00	100.00	.000174	.321	14,369	35,109	244	6
174 Winchester							11,124	16,974	152	
175 Windham	12,604	15,427,202	160.00	100.00	.000107	.132	2,778	3,233	116	
176 Windham			1,500.00	100.00			9,658	34,182	354	4.1
177 Windham							6,534	14,725	225	
178 Windsor	4,178	5,463,871	400.00	100.00	.000073	.111	4,497	8,746	194	2.
179 Windsor Locks	3,715	4,198,319	300.00	100.00	.000071	.244	4,389	6,687	150	1.8
180 Wolcott	563	595,835	50.00	50.00	.000083		306			
181 Woodbury	1,860	1,349,168	125.00	100.00	.000074	.09	4,200	10,256	244	5.5
182 Woodstock	1,849	979,843	75.00	95.64	.000102	.061	5,167	1,519	29	1.3
183 Woodstock			25.00	15.50			1,439	1,065	74	
184 Woodstock										

* Approximate.

TABLE IV — STATISTICAL REPORT

TOWN	NAME OF LIBRARY	date of establishment	date of adoption of state grant	free or subscription	number of volumes	ADDITIONS DURING YEAR		number of book takers	number of families represented
						by purchase	by gift		
1 Andover	Andover public	1879	.....	free	3,340	1	64	170	7
2 Ansonia	Ansonia public	1896	....	free	23,001	827	436	4,718	.....
3 Ashford	Babcock library	1865	.....	free	4,722	70	.....	.....	.....
4 Avon	Avon free public	1909	1909	free	1,646	85	.....	30	.....
5 Berlin	Berlin free library association	1892	1901	free	4,424	152	.....	256	13
6 Berlin	Peck memorial	1839	1901	free	2,783	(c)	171	.....	.....
7 Berlin	East Berlin library	1899	.....	subscription	963	.....	.....	.....	.....
8 Bethel	Bethel free public	1909	1909	free	3,860	104	311	.....	.....
9 Bethlehem	Bethlehem free public	1857	1899	free	2,179	11	59	120	.....
10 Bloomfield	Prosser public	1901	1902	free	4,813	247	43	850	20
11 Bolton	Bolton public	1914	1914	free	1,140	1	252	135	.....
12 Branford	James Blackstone memorial	1896	.....	free	.....	.....	.....	.....	.....
13 Bridgeport	Bridgeport public	1881	.....	free	69,227	5,491	467	.....	.....
14 Bridgewater	Bridgewater library association	1905	1905	free	2,150	8	167	150	.....
15 Bristol	Bristol public	1892	1897	free	32,160	3,220	318	4,371	.....
16 Brooklyn	Brooklyn public	1890	.....	free	5,271	102	29	206	.....
17 Burlington	Burlington public	1896	1896	free	1,621	.....	58	41	.....
18 Canaan	David M Hunt library	1891	.....	subscription	4,309	83	.....	.....	.....
19 Canton	North Canton library	1912	.....	free	.....	.....	.....	.....	.....
20 Canton	Canton public	1913	1913	free	2,108	.....	493	1,208	.....
21 Chaplin	William Ross public	1901	1901	free	1,609	100	9	75	.....
22 Cheshire	Cheshire public	1892	1904	free	6,442	257	153	app 700	.....
23 Chester	Chester public	1895	1895	free	5,309	78	144	500	.....
24 Clinton	Clinton free public	1910	1910	free	3,929	.....	143	1,084	.....
25 Colchester	Cragin memorial	1856	1904	free	5,966	83	264	.....	.....
26 Columbia	Saxton B Little memorial	1883	1896	free	6,695	27	126	100	.....
27 Cornwall	Cornwall library association	1889	.....	subscription	5,666	93	60	60	.....
28 Cornwall	West Cornwall association	1889	.....	subscription	1,070	.....	40	.....	.....
29 Coventry	Hale donation library	1804	.....	free	app 1,700	40	.....	.....	.....
30 Coventry	Booth and Dimock memorial	1880	1907	free	4,423	152	12	265	.....

(a) includes 3,762 school circulation (b) includes other books for children (c) includes gifts (d) includes 500 period

PUBLIC LIBRARIES.

41

OF LIBRARIES, 1916

STATISTICS OF BOOKS CIRCULATED					days and hours of opening	access to shelves	name of librarian or officer reporting	post office	
non-fiction	fiction	children's stories	other books for children	total					
				3,340	Wed 3-5 PM; Sat 6-8 PM	yes	Alice Lockett	Andover	1
8,955	24,743	10,892	10,768	59,145	Daily 9 AM-9 PM; Sun, Oct-May, 2-5 PM	yes	Ruby E Steele	Ansonia	2
					Daily	yes	O. P. Durkee	Warrenville	3
36	138	45	12	231		yes	mem. library com Mrs C B Hadsell	Avon	4
358	2,129	1,708 (b)		4,190	Wed 3-5, 7-8 PM	yes	Elizabeth J Wickwire	Berlin	5
149	342	751 (b)		1,271	Friday, 2-5 PM	yes	Bertha E Warren	Kensington	6
					Wed 6-7 PM; Sat 4-5 PM		Georgiana A Kelsey	East Berlin	7
1,607	12,282	3,163	1,288	18,339	Wed and Sat 3-5, 7-9 PM	yes	Marie Macbeth	Bethel	8
145	1,924	327	136	2,532	Sat 3-5 PM	yes	May Allen Johnson	Bethlehem	9
471	7,364	2,902	867	12,004	Mon, Wed and Sat 3-6, 7-9 PM	yes	Grace L Hayes	Bloomfield	10
329	849	505	78	1,756	Sat 2-5, 7-8 PM	yes	Adelia N Loomis	Bolton	11
									12
					Daily 9 AM to 9:30 PM	partial	Calhoun C Latham	Bridgeport	13
603	1,497	715 (b)		2,815	Sat and Wed, 4-6, 7-9 PM in winter; 7-9 PM in summer	yes	Mrs Burton E Canfield	Bridgewater	14
11,592	61,289	23,786	13,339	109,996	Daily 9 AM to 9 PM	yes	Charles L Wooding	Bristol	15
327	4,032	1,445 (b)		5,804	Sat 9-12 AM and 2-5 PM	yes	George F Gentung	Brooklyn	16
				646	Fri 7-8 PM and Sun 1 PM	yes	John A Reeve	Unionville	17
453	1,304	76 (b)		1,922	Mon, Wed, Sat 2-5, 6-9 PM	yes	Mrs W R Hubbell	Falls Village	18
									19
11,756 (i)		4,342 (b)		17,209 (j)	Wed and Sat, 2-5, 6:30-8:30 PM	yes	Lucia L Derrin	Collinsville	20
165	623	158	158	1,114	Wed 7-9 PM; Sat 4-5, 7-9 PM	yes	Ruth E Snow	Chaplin	21
1,124	8,710	3,309	833	13,976	Tue and Fri 3-5, 7-9 PM summer; Tues 12-1, 3-5, 7-9 PM; Fri 12-1, 3-5 PM; Sat 3-5 PM winter	yes	Mary E Baldwin	Cheshire	22
235	4,755	1,259	206	7,644 (e)	Wed, Fri, Sat 3-9 PM	yes	Mary E Denison	Chester	23
402	7,197	2,692	344	12,061 (f)	Mon, Wed, Sat 4-6, 6:30-9 PM	yes	Emma Stevens	Clinton	24
1,216	5,825	4,599	1,930	14,378 (g)	Tues, Thur, Sat 3-5, 7-9 PM	yes	Mary A Leal	Colchester	25
1,294 (b)	1,403 (h)			2,697	Fri 3:30-4:30, 7:30-8:30 PM	yes	Lillian W Rice	Columbia	26
450 (b)	1,523 (h)			1,973	Sat 2:30-5, 7-9 PM	yes	Mary J Whitney	Cornwall	27
				432	Thur 3 hrs	yes	C W Fitch, pres	West Cornwall	28
					Daily	yes	Rev Harris C Beebe	South Coventry	29
811	5,983	954 (b)		7,747	Tue, Sat 2:30-9 PM; Thur 2:30-6:30 PM	yes	E Gertrude Colburn	South Coventry	30

(e) includes 1,129 periodicals (f) includes 1,426 pay collection (g) includes 211 foreign and 397 periodicals
 (b) includes children's stories (i) includes adult fiction (j) includes 1,111 periodicals

TABLE IV — STATISTICAL REPORT

TOWN	NAME OF LIBRARY	date of establishment	date of adoption of state grant	free or subscription	number of volumes	ADDITIONS DURING YEAR		number of book takers	number of families
						by purchase	by gift		
31 Coventry	Porter library association	1888	.....	free	801	.....	.....	50	.....
32 Cromwell	Belden library association	1888	1913	free	3,596	39	162	535	.....
33 Danbury	Danbury public	1869	1913	free	22,778	920	413	3,166	.....
34 Darien	Darien free	1901	1902	free	6,506	.....	113	675	3
35 Derby	Harcourt Wood memorial,	1901	1901	free	19,285	737	449	6,466	.....
36 Derby	Derby Neck free	1896	1913	free	14,445	.....	.....	est 800	est 2
37 Durham	Durham public	1894	1894	free	5,954	130	10	272	10
38 Eastford	Eastford public	1896	1896	free	2,573	1	82	170	.....
39 East Haddam	East Haddam public	1888	1894	free	7,644	.....	163	est 400	est 1
40 East Hampton	East Hampton public	1898	1898	free	est 6,000	94	508	app 400	app 2
41 East Hampton	Middle Haddam public	1892	1911	free	2,651	72	81	82	.....
42 East Hartford	East Hartford public	1896	1896	free	.....	529	237	.....	.....
43 East Haven	East Haven free public	1909	1909	free	1,777	20	67	560	2
44 East Lyme	Niantic public	1888	1910	free	3,026	.....	136	219	.....
45 East Windsor	East Windsor library association	1849	1909	free	3,702	60	17	293	1
46 East Windsor	Warehouse Point library association	1875	1909	free	2,132	6	153	580	.....
47 Ellington	Hall memorial	1881	1896	free	6,123	3	2	500	3
48 Enfield	Enfield free public	1896	1896	free	7,243	451	79	1,142	.....
49 Essex	Essex library	1890	.....	subscription	.....	.....	.....	.....	.....
50 Essex	Ivoryton circulating	1871	.....	subscription	3,304	107	.....	60	.....
51 Fairfield	Fairfield memorial	1876	.....	free	10,678	431	128	1,041	5
52 Fairfield	Pequot library	1894	.....	free	40,672	326	310	.....	.....
53 Farmington	Village library	1890	.....	free	8,000	34	241	.....	.....
54 Farmington	West End library	1902	.....	free	2,994	35	73	1,130	7
55 Glastonbury	Glastonbury free public	1895	1895	free	4,916	280	296	732	4
56 Goshen	Goshen public	1901	1901	free	3,758	35	172	176	7
57 Granby	Granby public	1887	1912	free	2,655	55	12	80	3
58 Granby	Frederick H Cossett library	1889	1900	free	8,409	.....	326	815	.....
59 Greenwich	Greenwich public	1877	1916	free	9,575	537	471	2,298	2,7
60 Greenwich	Perrot memorial	1905	.....	free	2,186	15	121	250	14
61 Griswold	Slater library	1884	.....	free	4,318	154	18	253	11

(i) includes adult fiction (b) includes other books for children (k) includes 1,236 branch circulation

OF LIBRARIES, 1916

STATISTICS OF BOOKS CIRCULATED					days and hours of opening	access to shelves	name of librarian or officer reporting	post office
non-fiction	fiction	children's stories	other books for children	total				
				app 250	At any time	.....	Mrs Louise J Loomis	So. Coventry R D 1
320	3,861	920	298	5,404	Tue 3-5:30, 7-9 PM; Sat 7-9 PM	yes	Sarah M Savage	Cromwell 32
5,884	30,956	15,650	8,735	61,225	Daily 9 AM-9 PM; Sun 2-5 PM	yes	Ella R McDowell	Danbury 33
440	4,646	1,971	306	7,373	Daily exc holidays 3-5:30 PM, 6:30-8 PM; Sat 9 PM	yes	Emily Hall	Darien 34
6,954	23,732	12,763	12,585	56,034	Daily 9 AM-9 PM; Sun Oct-May 2-5 PM	yes	Minnie B Cotter	Derby 35
				est 20,000	Thur and Sun 3-5 PM	yes	Mrs W G Shaw	Derby 36
625	5,500	1,082		8,207	Tue and Sat, exc holidays, 4 hrs each	yes	Gertrude L Hart	Durham Center 37
454	1,785	1,039	719	3,997	Fri 3-5, 7-8:30 PM	yes	Lillian L Huntington	Eastford 38
1,194	2,795	2,639	1,355	9,809	Daily 2-8:30 PM	yes	Blanche R Boyd	Moodus 39
643	4,390	2,191	372	7,596	Mon 7-9 PM; Wed 5-7 PM; Sat 2-6 PM	yes	Margery Abell	East Hampton 40
628	2,227	283	63	3,201	Sat winter 2:30-4:30 PM; summer 3:30-5:30 PM	yes	Ethel H Taylor	Middle Haddam 41
683	14,413	6,330	1,175	22,801	Tue, Thur, Sat 2-5:30, 7-8:30 PM	partial	Jessie W Hayden	East Hartford 42
401	3,652	2,069	139	6,291	Tue 3-5 PM; Sat 2-8:30 PM	yes	Lottie E Street	East Haven 43
1,858	2,795	472	385	5,510	Mon and Thur 3-6 PM	yes	Anne M Bond	Niantic 44
327	2,508	926		4,261	Sat 3-5 PM; Sun 11:45-1, 6:30-8 PM	yes	S Wolcott Bissell	Warehouse Pt. RFD 45
98	3,116	1,585	119	4,918	Wed 7-9 PM; Sat 2-5, 7-9 PM	yes	Mrs May B Judd	Warehouse Point 46
695	2,634	1,644		4,973	Daily 1:30-5:30, 7-9 PM	yes	Ida M Bancroft	Ellington 47
1,202	12,147	4,582	2,389	22,320	Tue, Wed, Fri, Sat 2-9 PM; July and Aug 2-8 PM	yes	Lillian V Bailey	Thompsonville 48
					Thur eve, Sat afternoon	yes	Mrs David R Parmelee	Ivoryton 49
703	10,076	4,119	3,701	24,599	Daily 9 AM-6 PM; 7-9 PM	yes	Emma F Wakeman	Fairfield 50
493	5,672	1,533	1,914	11,612	Daily exc holidays 9-12:30, 2-6, 7-8 PM; holidays exc July 4 and Dec 25 7-9 PM	partial	Josephine S Heydrick	Southport 51
685	4,755	2,274		9,714		yes	Mrs T H Root	Farmington 52
402	5,958	2,496		10,456	Mon, Thur, Sat 6-9 PM; Wed, Fri 4-6 PM; closed Mon and Wed in summer	yes	Eliz M Bridgeman	Unionville 53
809	3,770	2,377	790	7,746	Tue, Fri 3-5 PM and 7-9 PM Oct-July	yes	Mrs Chas G Rankin	Glastonbury 54
749	2,554	2,550		7,853	Sat 2-9 PM	yes	Emma C Beardale	Goshen 55
					Sat 4-5, 6:30-8 PM	yes	Lucy E Katinas	Granby 56
				2,380	Sat 2-5 PM	partial	Helen M Shaw	North Granby 57
490	16,861	2,252	5,746	28,339	Week days 9 AM-9 PM; Sun 2:30-6 PM	yes	Ella M Brush	Greenwich 58
807	1,411	822		2,440	Tue and Fri 2-5 PM	yes	Mabel O Grumman	Sound Beach 59
130	2,575	2,921		7,326	Tue and Thur, 2-5, 6-8 PM; Sat 2-5, 6-9 PM, Mon, Wed, Fri 6-8 PM	partial	Mabel E Wilcox	Jewett City 60

TABLE IV — STATISTICAL REPORT

TOWN	NAME OF LIBRARY	date of establishment	date of adoption of state grant	free or subscription	number of volumes	ADDITIONS DURING YEAR		number of book taken	number of families
						by purchase	by gift		
62 Griswold	Coit library	1876	.....	free	.....	.....	.....	.....	.....
63 Groton	Bill memorial	1888	.....	free	6,896	105	27	.....	.....
64 Groton	Mystic and Noank library	1892	.....	subscription	7,137	.....	83	376	.....
65 Groton	Library of the Baptist Church	1826	.....	free	908	.....	102	318	.....
66 Guilford	Guilford free	1888	.....	free	est 2,400	.....	25	est 180	.....
67 Haddam	Brainerd memorial	1887	.....	free	4,080	34	125	100	.....
68 Hamden	Mt. Carmel free public	1900	.....	free	2,687	119	57	328	.....
69 Hampton	Hampton public	1895	1895	free	est 4,000	65	61	50	.....
70 Hartford	Hartford public	1892	.....	free	130,000 est	7,526	760	17,000 est	.....
71 Hartford	Watkinson library of reference	1858	.....	free	.....	.....	.....	.....	.....
72 Harwinton	Theodore Hungerford memorial	1912	1912	free	2,352	.....	3	125	.....
73 Hebron	Hebron library association	1889	1899	free	4,128	.....	90	225	.....
74 Huntington	Plumb memorial	1892	1896	free	15,111	540	178	2,447	.....
75 Kent	Kent library association	.....	.....	free	opened	February, 1917	No rep	.....	.....
76 Killingly	Free public	1854	1899	free	.....	348	.....	1,597	.....
77 Lebanon	Jonathan Trumbull library	1896	1896	free	2,943	51	180	229	.....
78 Ledyard	Bill library	1867	.....	free	3,853	1	19	114	.....
79 Litchfield	Wolcott and Litchfield circulating	1862	1906	free	13,239	440	185	1,075	.....
80 Litchfield	Gilbert library	1892	.....	free	.....	.....	.....	.....	.....
81 Lyme	Public library	1914	1914	free	1,515	55	360	150	.....
82 Madison	E C Scranton memorial	1895	1900	free	8,840	427	105	.....	.....
83 Madison	East River library	1876	.....	subscription	2,628	38	6	41	.....
84 Manchester	Manchester public	1895	1896	free	4,561	293	127	1,681	.....
85 Manchester	South Manchester free	1871	.....	free	11,470	1,064	.....	3,124	.....
86 Mansfield	Mansfield Center library	1906	1911	free	1,347	19	178	273	.....
87 Meriden	Curtis memorial	1898	1896	free	23,060	659	110	12,113	.....
88 Middlebury	Middlebury library	1896	1896	free	2,269	11	19	.....	.....
89 Middlefield	Levi E Coe association	1893	1895	free	6,312	14	158	211	.....
90 Middletown	Russell free	1874	.....	free	.....	.....	.....	.....	.....
91 Milford	Taylor library			free	est 14,000	225	300	2,794	
92 Montville	Raymond library	1884		free	6,079	154		50	

PUBLIC LIBRARIES.

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OF LIBRARIES, 1916

STATISTICS OF BOOKS CIRCULATED					days and hours of opening	access to shelves	name of librarian or officer reporting	post office	
book collection	fiction	children's stories	other books for children	total					
				4,681					62
				4,709	Tue and Sat 2-5:30 PM; During July and Aug. Tues and Sat 10-12 AM Daily, all day	partial	Genevra E Ricker	Mystic	64
						yes	Ada M Davis	Noank	65
140	2,145	818	54	3,157	Tue 3-4:30 PM; Wed and Sat 7-8:30 PM	yes	Martha G Cornell	Guilford	66
2,930	285	2,418	1,034	6,667	Wed and Sat 3-8 PM	yes	Mrs G A Dickinson	Haddam	67
					Tue, Thur, Sat 3-5:30 PM; Tue, Sat 3-5:30; 7-8:30 PM	yes	Laura L Dickerman	Mt Carmel	68
					Sat 2-4 PM; summer 3-5 PM	yes	Kate A Thompson	Hampton	69
13,516	105,609	33,039	19,987	295,563 (1)	Week days exc Sat 9 AM-8 PM; Sat 9 AM-9 PM; Sun reading and ref rooms 2-7:30 PM	partial	Caroline M Hewins	Hartford	70
									71
606	1,060	244	173	2,085	Wed and Sat 1:30-5:00 PM; Sun 12-1:30 PM	yes	Mrs R M Reynolds	Torrington R D 2	72
758	1,478	1,119	372	3,727	Tue, Fri 3-5, 7-9 PM	yes	Caroline E Kellogg	Hebron	73
5,124	17,103	8,339	5,068	39,699 (j)	Daily exc holidays 10-12 AM, 1-9 PM	yes	Jessamine Ward	Shelton	74
							Mrs A L Tuttle	Kent	75
2,165	10,653	6,995	1,109	26,922	Daily 1-9 PM	yes	Henry M. Danielson	Danielson	76
412	3,859	341	526	5,138	Sat 2-5, 7-9 PM winter; 2-6, 7-9 PM summer	yes	Katherine H Sweet	Lebanon	77
				1,001	Sat 9-12, 1-4 PM; Sun 12-1 PM	yes	Mrs Ursula E Avery	Norwich R D 6	78
1,260	15,445	5,354	919	24,130 (k)	Daily exc holidays, 10-12:30, 2:30-6 PM; Thur 7:30-9 PM	yes	Katharine Baldwin	Litchfield	79
									80
290	1,885	250	95	2,520	Wed 3-5 PM; Sun 12-3 PM	yes	Lizzie M Bill	Lyme	81
370	10,579	4,074		18,106	Daily Dec-May, 2-9 PM; May-Dec, 9-12, 2-9 PM	yes	Evelyn Meriwether	Madison	82
					Daily 2:30-4:45, 5-45-8 PM	yes	Mrs William Werner	East River	83
640	8,980	5,095	284	14,999	Mon, Wed, Sat, 7-9 PM; Tue, Thur, Sat, 3-6 PM	yes	Gertrude G Boynton	Manchester	84
185	23,614	15,051	7,806	50,656	Daily 2-6, 7-9 PM	yes	Louise L Bartlett	So Manchester	85
190	1,508	387	455	3,540	Tue 3-5 PM; Sat 7:30-9 PM	yes	Elsie G Marsh	Mansfield Center	86
377	21,892	10,939	7,507	47,715	Daily 10 AM-9 PM	yes	Corinne A Deshon	Meriden	87
					Daily	yes	F S Chamberlain	Middlebury	88
112	1,856	1,809	123	4,000	Wed, Sat, 1-5 PM	yes	Lily May Terrill	Middlefield	89
				32,988	Daily exc holidays, 10-12, 3-6, 7-9 PM	partial	Laura F Philbrook	Middletown	90
				32,232	Daily exc holidays, 9-1, 3-5, 7-9 PM	yes	Wallace S Chase	Milford	91
				1,192	Sat 2-4 PM; Sun 12 M	yes	Mrs Lucy P Scholfield	Uncasville R D	92

includes 4,065 branch circulation

(k) includes 162 foreign books

(l) includes 62,045 branch circulation

TABLE IV — STATISTICAL REPORT

TOWN	NAME OF LIBRARY	date of establishment	date of adoption of state grant	free or subscription	number of volumes	ADDITIONS DURING YEAR		number of book takers	number of families
						by purchase	by gift		
93 Morris	Morris public	1900	1900	free	2,719	9	60	45	2
94 Naugatuck	Howard Whittemore memorial	1888	.....	free	13,435	501	50	.....	.....
95 New Britain	New Britain Institute	1853	1901	free	est 59,000	7,044	640	13,600	.....
96 New Canaan	New Canaan reading room and circulating library association	1877	1895	free	9,831	147	673	1,173	61
97 New Fairfield	New Fairfield free	1897	1897	free	1,147	.....	32	24	1
98 New Hartford	New Hartford free public	1906	1906	free	.....	.....	.....	.....	.....
99 New Haven	New Haven free public	1886	.....	free	125,000 est	10,689	936	26,246	.....
100 New Haven	Young Men's Institute	1826	.....	subscription	27,438	740	24	.....	.....
101 New Haven	Donald G. Mitchell and Beecher Park memorial	1910	.....	free	2,129	.....	497	1,307	.....
102 Newington	Newington free	1894	1895	free	3,485	5	95	330	10
103 New London	New London public	1891	.....	free	36,165	1,257	60	8,910	.....
104 New Milford	New Milford public	1886	1907	free	.....	.....	.....	.....	.....
105 New Milford	Phoenix library	.....	.....	subscription	992	13	1	8	.....
106 Newtown	Beach memorial	1876	.....	subscription	.....	.....	.....	.....	.....
107 Newtown	Sandy Hook free	1897	.....	free	2,392	101	43	182	1
108 Newtown	Zoar library	1908	.....	free	.....	.....	.....	.....	.....
109 Norfolk	Norfolk library	1888	.....	free	.....	.....	.....	.....	.....
110 North Canaan	Douglas library	1821	1895	free	4,672	36	20	200	1
111 North Haven	Memorial library	1884	1902	free	5,510	86	184	392	1
112 No Stonington	Wheeler library	1908	1915	free	5,500	177	139	447	app
113 Norwalk	Norwalk public	1865	.....	free	15,250 (o)	599	131	8,178	.....
114 Norwalk	South Norwalk public	1878	.....	free	12,074	923	16	.....	.....
115 Norwalk	Rowayton library	1903	.....	free	3,156	81	75	375	1
116 Norwalk	East Norwalk library	.....	.....	free	.....	.....	.....	.....	.....
117 Norwich	Otis library	1850	1906	free	42,921	2,860	203	.....	.....
118 Old Lyme	Phoebe Griffin Noyes memorial	1874	1912	free	7,749	167	181	400	.....
119 Old Saybrook	Acton library	1854	1904	free	7,152	23	77	1,210	app
120 Orange	West Haven public	1906	1906	free	3,792	169	121	1,009	.....
121 Oxford	Oxford free public	.....	.....	free	280	.....	65	.....	.....
122 Plainfield	Aldrich free	1896	1913	free	.....	.....	119	387	.....
123 Plainville	Plainville public	1894	1894	free	4,065	167	54	527	.....

(i) includes adult fiction (b) includes other books for children (c) covers only 11 months

PUBLIC LIBRARIES.

47

OF LIBRARIES, 1916

STATISTICS OF BOOKS CIRCULATED					days and hours of opening	access to shelves	name of librarian or officer reporting	post office
non-fiction	fiction	children's stories	other books for children	total				
					Sat 2-4 PM	yes	Myrtle Morgan	Morris 93
2,334	14,129	14,153	2,704	34,520	Thur, Fri, 3-5 PM; Mon, Wed, Sat 3-5, 7-9 PM	partial	E M Goodyear	Naugatuck 94
2,809	74,598	44,051	25,380	206,702	Daily 9 AM-9 PM; Sun 2-5 PM	partial	Anna G Rockwell	New Britain 95
1,469	8,410	2,788	500	13,257	Daily 10-1, 2-6, 7-9 PM; Sun 2-6 PM	yes	Stella Waters	New Canaan 96
36	138	45	8	227	Sat 2-4 PM	yes	Mrs C H Williams	Danbury R D 97
								98
4,455	176,150	136,137	62,608	521,880	Daily 9 AM-9 PM	yes	Willis K Stetson	New Haven 99
7,931	25,450	630	309	34,320	Daily 9 AM-7 PM	yes	Abigail D Dunn	New Haven 100
				34,253	Daily exc holidays, 1-9 PM	yes	Herbert F Larkin	Westville 101
186	1,509	1,098	114	2,907	Wed, Sat 3-5, 7-8:30 PM	yes	Jennie E Chidley	Newington 102
1,702		31,573		87,275	Daily 10 AM-9 PM	yes	Fred'k W Edgerton	New London 103
(1)		(b)						104
							Mrs Howard Hendryx	Northville 105
								106
				3,276	Sat 3-5, 7-8 PM	yes	Mrs Susan M Sniffen	Sandy Hook 107
								108
								109
015	3,269	1,337		5,621	Tue, Sat, 2-5, 7-9 PM	yes	Mrs Nellie A Preston	Canaan 110
	(b)			(x)				
737	6,838			7,575	Tue, Sat, 2-4:30, 7-9 PM	yes	Clara E Bradley	North Haven 111
702	2,719	1,481	750	6,652	Daily 2:30-5 PM; Wed, Sat 7-9 PM	yes	Mrs Edna H Tryon	No Stonington 112
802	32,002	6,080	1,157	60,051	Daily 9:30-1, 2:30-6, 7-9 PM	yes	Dotha S Pinneo	Norwalk 113
70	21,679	8,109	3,148	37,675	Daily, exc holidays, 9 AM-9 PM; July and Aug, 9 AM-8 PM	yes	Mrs A E Blanchard	So Norwalk 114
48	2,407	755		3,410	Daily 3:30-6, 6:45-8:15 PM	yes	Clara D Raymond	Rowayton 115
							Mary Ridger	East Norwalk 116
53	69,464	22,333	6,269	118,049	Daily 9:30 AM-9 PM	yes	Imogene A Cash	Norwich 117
31	6,484			9,175	Mon, Wed, 2-5, 7-9 PM; Tue, Thur, Fri, 2-5 PM	yes	Bessie Connolly	Lyme 118
	(h)							
70	4,333	885	139	5,927	Sat 11-12:30, 2-5, 7-9 PM; Tue, Thur, Sat, 2-6, 7-8:30, summer, 9 PM	yes	Sarah G Granniss	Old Saybrook 119
14	13,515	6,663		23,062	Tue, Thur, Sat, 1-9 PM	yes	Mrs R H Lewis	West Haven 120
		(b)		82			Ruth Sanford	Oxford 121
6	3,711	1,570		6,670	Wed, Sat 2-9 PM	yes	Mrs C A Sanderson	Moosup 122
3	5,901	3,664	282	10,410	Mon, Wed, 2-5 PM; Sat 2-5:30, 7-9 PM	yes	Frances E Bunnell	Plainville 123

includes children's stories (x) closed 6 weeks because of paralysis (l) includes 33,880 branch circulation
 al number entered in accession book. Records do not show number of volumes actually in library
 includes 52,500 school circulation

TABLE IV — STATISTICAL REPORT

TOWN	NAME OF LIBRARY	date of establishment	date of adoption of state grant	free or subscription	number of volumes	ADDITIONS DURING YEAR		number of book takers	number of
						by purchase	by gift		
124 Plymouth	Plymouth library association	1870	.....	subscription	est 4,000	50	50	125	.....
125 Plymouth	Terryville library	1895	1895	free	4,153	82	118	1,548	.....
126 Pomfret	Pomfret library	1882	.....	free	7,327	104	26	75	.....
127 Pomfret	Social library of Abington	1793	.....	free	.....	.....	.....	.....	.....
128 Portland	Buck library	1895	1895	free	5,994	104	110	.....	.....
129 Preston	Preston public	1898	.....	free	1,776	45	11	.....	.....
130 Prospect	Prospect public	1886	1895	free	2,560	1	178	.....	.....
131 Putnam	Putnam free public	1894	1894	free	6,902	383	128	877	.....
132 Redding	Mark Twain library	1908	.....	free	5,203	108	32	178	.....
133 Ridgefield	Ridgefield library	1880	.....	subscription	9,654	130	215	.....	.....
134 Rocky Hill	Rocky Hill library association	1794	.....	subscription	1,859	35	2	95	.....
135 Roxbury	Roxbury public	1875	1896	free	2,497	52	.....	75	.....
136 Salem	Salem library	1914	1914	free	464	12	136	158	.....
137 Salisbury	Scoville memorial library	.....	.....	free	est 11,000	384	380	582	.....
138 Saybrook	Deep River public	1899	1899	free	.....	.....	87	649	.....
139 Scotland	Scotland public	1895	1895	free	2,529	.....	53	60	.....
140 Seymour	Seymour public	1893	1893	free	7,139	209	133	1,745	.....
141 Sharon	Hotchkiss library	1893	.....	subscription	7,292	105	67	190	.....
142 Sharon	Everitt library	1866	.....	free	1,848	21	.....	35	.....
143 Sherman	Sherman public	.....	.....	free	.....	.....	.....	.....	.....
144 Simsbury	Simsbury free	1874	.....	free	12,768	325	111	577	.....
145 Somers	Somers free public	1895	1895	free	3,917	1	106	200	.....
146 Southbury	South Britain public	1904	1904	free	2,960	83	.....	79	.....
147 Southington	Southington free public	1900	1900	free	7,493	262	81	.....	.....
148 South Windsor	South Windsor public	1898	1898	free	3,445	166	136	345	.....
149 South Windsor	Sadd memorial	1905	.....	free	2,322	199	13	.....	.....
150 Stafford	Stafford library association	1876	.....	free	6,039	247	25	800	.....
151 Stamford	Ferguson library	1880	1911	free	28,521	2,017	185	10,663	.....
152 Stamford	Glenbrook library	1913	.....	free	2,226	300	.....	513	.....
153 Stonington	Stonington free	1887	.....	free	7,325	176	30	.....	.....

(c) includes gifts

(b) includes other books for children

(h) includes children's stories

PUBLIC LIBRARIES.

49

OF LIBRARIES, 1916

STATISTICS OF BOOKS CIRCULATED					days and hours of opening	access to shelves	name of librarian or officer reporting	post office	
non-fiction	fiction	children's stories	other books for children	total					
				3,685	Mon 7-9 PM; Fri 4-5:30, 7-9 PM	yes	A J Hill pres	Plymouth	124
2,196 (b)	4,312	4,061		10,570	Wed 4-5, 6:30-8:30 PM; Sat 3-5, 6:30-8:30 PM	yes	Gertrude E Ellis	Terryville	125
					Tue and Fri 10-12 M, May-Nov; Fri, PM, 2 hrs Nov-May	yes	Marion L Harvey	Pomfret	126
									127
567	7,362	3,133 (b)		11,052	Wed 2-4 PM; Sat 2-4, 7-9 PM	yes	Frances P Robinson	Portland	128
				515	Wed, Sat 2-5, 7-9 PM	yes	Miss C E Hallett	Norwich R F D 3	129
				est 2,000	Sun 1-1:30 PM; Wed 3-5 PM	yes	Mrs W E Clark	Waterbury RFD 2	130
1,350	8,145	4,053	1,647	15,204	Daily 3-6, 7-9 PM	yes	Emma J Kinney	Putnam	131
99	1,504	402 (b)		2,008	Mon, Wed, 3-6 PM; Sat 3-6, 7-9 PM	yes	W E Grumman	Redding	132
1,318	7,680	3,100 (b)		12,284	June-Nov Daily, 10-12 AM and 3-6 PM; Nov-June Daily 2-5:30 PM; Sat 7-9 PM	yes	Jennie Smith	Ridgefield	133
				1,850	Every other Fri 2-5, 7-9 PM	yes	Mrs A W Wright	Rocky Hill	134
				1,685	Wed 3:30-5, 7-9 PM; Fri 3:30-5, 7:30-9 PM	yes	Walter D Humphrey	Roxbury	135
324	1,008	444	120	1,896	Wed, 3-5 PM; Sat, 3-5, 7-9 PM	yes	Mrs Helen M Malona	Colchester RFD	136
1,906	8,826	1,769	1,496	11,087	Daily 11-12 AM, 2:30-5:30 PM; Tue, Fri, Sat, 7-9 PM	yes	J A Chapin	Salisbury	137
629	3,842	1,130	625	6,226	Wed, Sat, 3-5, 6:30-8 PM; July and Aug, Thur	yes	Mrs Lena A Bailey	Deep River	138
100	1,060	850	50	2,050	Sun 12-12:30 PM; Fri 2-4, 7:30-8:30 PM	yes	Mary A Smith	Scotland	139
1,406	10,945	4,792	2,734	21,877	Daily 2-6 PM; Tue, Thur, Sat 7-9 PM	yes	Edyth M Lovering	Seymour	140
1,146	3,403	300	51	5,090	Daily, exc holidays, 10-12 AM; 3-5 PM; 7-9 PM	yes	Flora A Ryan	Sharon	141
				435			Olive L Johnson	Sharon R F D 3	142
							Ruth Rogers	Sherman	143
392	4,849	1,891			Wed and Sat 3-5, 6-9 PM	yes	Carrie McRoy	Simsbury	144
239	2,398	888	261	3,786	Wed, Sat, 3-5, 7-9 PM	yes	Augusta I Lombard	Somers	145
225	1,858	701	88	2,872	Sat, 4 hrs	yes	Mrs C P Williams	So Britain	146
417	8,731	3,137	920	15,205	Tue, Thur, Sat, 3-5:30, 7-9:30 PM	yes	Mrs Chas H Bissell	Southington	147
				7,653	Mon, Thur, 2:30-5 PM	yes	Elvira C Clapp	South Windsor	148
				3,399	Tue, 3-5 PM; Fri 7-9 PM	yes	Annie V Collins	Wapping	149
994	8,660	4,541	1,558	16,762	Daily 2-6, 7-8:30 PM	yes	Anna Heald	Stafford Springs	150
171	73,327	22,433	23,440	145,871	Daily 9 AM-9 PM; Sun in winter, 2-5 PM	yes	Alice M Colt	Stamford	151
				7,943	Daily, 5 hrs	yes	Mrs F L MacLeod	Glenbrook	152
999 (h)	10,047			11,146	Daily, exc holidays, 10-12 AM, 2-4 PM; Tue, Thur, Sat 7-8:30 PM	yes	Mrs K Hahn	Stonington	153

TABLE IV — STATISTICAL REPORT

TOWN	NAME OF LIBRARY	date of establishment	date of adoption of state grant	free or subscription	number of volumes	ADDITIONS DURING YEAR		number of book taken	number of families represented
						by purchase	by gift		
154 Stratford	Stratford library	1885	1896	free	16,808	479	235	app 5,000	.....
155 Suffield	Suffield free public or Kent memorial	1884	1894	free	18,956	249	136	app 1,100	.....
156 Thomaston	Thomaston public or Laura Andrews free	1880	1898	free	6,085	205	27	app 757	.....
157 Thompson	Thompson library	1902	1903	free	4,472	17	179	368	230
158 Thompson	New Boston library	1855	.....	subscription	2,153	25	4	20	13
159 Tolland	Tolland public	1898	1899	free	2,721	82	.....	300	104
160 Torrington	Torrington library	1865	.....	subscription	.....	(c)	.....	.....	.....
161 Union	Union free public	1894	1894	free	est 3,500	.....	.....	90	3
162 Vernon	Rockville public	1896	1896	free	12,059	678	108	2,746	.....
163 Vernon	Talcott free	1881	.....	free	.....	.....	.....	.....	.....
164 Wallingford	Wallingford public	1881	1899	free	13,717	589	252	2,154	1,294
165 Warren	Warren public	1914	.....	free	424	.....	38	84	4
166 Washington	Gunn memorial	1881	.....	free	5,201	127	100	327	194
167 Waterbury	Silas Bronson library	1899	.....	free	100,074	6,204	495	9,631	.....
168 Watertown	Watertown library association	1865	.....	free	9,336	435	16	874	.....
169 Watertown	Oakville library	1914	.....	free	794	42	171	280	12
170 Westbrook	Westbrook public	1895	.....	free	4,580	1	189	532	17
171 West Hartford	West Hartford free	1883	1897	free	4,816	86	71	.....	.....
172 Westport	Jesup memorial	1884	1908	free	7,607	320	130	2,562	.....
173 Wethersfield	Wethersfield public	1894	1894	free	6,900	131	112	300	.....
174 Wilton	Wilton library association	1895	.....	subscription	1,943	14	80	app 107	.....
175 Winchester	Beardsley library	1874	1899	free	14,624	582	37	4,012	.....
176 Winchester	Gilbert School library	1895	.....	free	11,146	314	7	.....	.....
177 Windham	Windham free public	1897	.....	free	2,450	46	18	147	.....
178 Windham	Willimantic public	1871	1913	free	9,208	166	59	.....	.....
179 Windham	Dunham Hall library	1878	.....	free	6,219	163	.....	816	.....
180 Windsor	Windsor free	1888	1896	free	4,235	131	96	872	.....
181 Windsor Locks	Windsor Locks public	1907	1907	free	4,084	98	112	1,267	.....
182 Wolcott	Public library	1915	.....	free	.....	.....	.....	.....	.....
183 Woodbury	Woodbury public	1880	1897	free	3,533	64	71	app 200	.....
184 Woodstock	Woodstock library association	1878	1907	free	5,002	16	52	126	.....
185 Woodstock	East Woodstock library association	1875	1907	free	1,326	1	52	125	.....
186 Woodstock	West Woodstock library association	1899	.....	subscription	.....	.....	.....	.....	.....

includes other books for children
includes gifts

(h) includes children's stories
(i) includes adult fiction

(r) includes 1,529 branch circulation

PUBLIC LIBRARIES.

51

OF LIBRARIES, 1916

STATISTICS OF BOOKS CIRCULATED					days and hours of opening	access to shelves	name of librarian or officer reporting	post office
non-fiction	fiction	children's stories	other books for children	total				
3,853	14,963	5,615	1,811	26,242	Daily 10-12 AM, 2:30-5:30 PM, 7-8:30 PM	yes	Frances B Russell	Stratford 154
1,958	7,730	3,519	1,195	14,402	Daily 2-5:45, 6:45-8 PM, Sat 9 PM	no	Madeline H Spencer	Suffield 155
601	11,191	3,187	1,408	16,387	Tue, Thur, Sat, 2-5, 7-9 PM	no	Martha E Potter	Thomaston 156
996	4,778	1,434 (b)		7,208	Tue, Fri, 2-5, 7-9 PM	yes	Harriet R Lewis	Thompson 157
29	300	100 (b)		429	Thur 4:30-6 PM	yes	A Ursula Putney	Quinebaug 158
384	1,561	457		2,402	Tue, 7-9 PM; Sat 2-5 PM	yes	Lucile Agard	Tolland 159
								160
				1,160	Sun and Wed 1-4 PM	yes	Leonard Wilkins	Stafford Springs 161
6,572	22,680	10,076	4,947	44,575	Daily 10 AM-9 PM and Nov-May 2-5 PM Sun	yes	Edith M Peck	RFD 2 Rockville 162
								163
6,505	23,923	8,338	3,846	42,607	Daily 9 AM-9 PM	yes	Emma Lewis	Wallingford 164
					Sat 2-5 PM	yes	Mrs Robert Swift	Cornwall Bridge 165
748	3,873	973	337	5,931	Daily 2:30-6 PM	yes	Olga C Rydene	RFD Washington 166
49,560 (i)		144,325 (b)		293,885	Daily, 9 AM-9 PM Sun Oct-Apr, 4 hrs	partial	Helen Sperry	Waterbury 167
2,749 (b)	10,491 (h)			13,240	Mon, Wed, Fri, 2-6, 7-8:30 PM	yes	Jennie M Smith	Watertown 168
229	2,663	2,033	1,409	6,364	Tue, 7-8:30 PM; Sat 2-5 PM	yes	Marion K Cooper	Oakville 169
1,670	3,263	700	621	6,254	Mon, Wed, Sat, 3-5, 6:30-8:30 PM	yes	Lynda H Stannard	Westbrook 170
				8,449	Daily 3-6, 7-9 PM (g)	yes	Elizabeth S Elmer	West Hartford 171
7,254	16,272	7,990	1,474	32,990	Daily 9-5, 7-9 PM	yes	Edith Very	Westport 172
190	9,066	3,679 (b)		12,935	Mon 7-9 PM; Wed, 3-5 PM; Sat 3-5, 7-9 PM	yes	Mrs R D Vosburgh	Wethersfield 173
				1,070	Wed and Sat 2-5 or 6 PM	yes	Anna E Carpenter sec of association	Wilton 174
2,311	25,154	66,60	2,529	37,654	Daily 1:15-6, 7-9 PM	yes	Helena B Alford	Winsted 175
3,506	7,115	3,014	2,040	15,677	Mon, Tue, Thur, Fri 8:30-1:30 PM; Wed 8:30 AM-9 PM; Sat 2-9 PM	yes	Grace A Child	Winsted 176
1,356	156	224 (b)		1,756	Dec-June, once a week; June-Dec, Wed and Sat, 3-5 PM	yes	Grace P Bates	Windham 177
1,675	24,401	3,928	2,056	34,060	Daily 2-9 PM	partial	Bell B Rigglesman	Willimantic 178
659	8,417	5,540 (b)		14,616	Daily 12-6, 7-9 PM	yes	Mrs H B Gates	Willimantic 179
808 (b)	6,073 (h)			8,410 (r)	Tue and Thur 3-5:30 PM; Sat 3-5:30, 7-9 PM	yes	Kate P Safford	Windsor 180
338	5,345	1,977	545	8,205	Wed and Sat, 3-5 Daily in the evening	yes	Lula Stockwell	Windsor Locks 181
								182
417	3,573	1,521	481	5,992	Wed and Sat 3-5, 6:30-7:30 PM	yes	Edward S Boyd	Woodbury 183
268	663	85	52	1,068	Mon and Thur 3-5 PM in summer; Thur 2-4 PM in winter	yes	Mrs Louise L Child	Woodstock 184
				1,285	Tue 3-5 PM	yes	Mrs Lillian A May	East Woodstock 185
								186

includes 1483 branch circulation

TABLE IV—STATISTICAL REPORT

TOWN	NAME OF LIBRARY	date of establishment	date of adoption of state grant	free or subscription	number of volumes	ADDITIONS DURING YEAR		number of book takers	number of families represented
						by purchase	by gift		
1 Andover	Andover public	1879	1895	free	.....	.....	.....	.....	.....
2 Ansonia	Ansonia public	1896	1896	free	19,712	681	190	5,759	.....
3 Ashford	Babcock library	1865	.....	free	4,884	88	.....	.....	.....
4 Avon	Avon free public	1909	1909	free	2,060	.....	89	.....	.....
5 Berlin	Berlin free library association	1892	1901	free	.....	.....	.....	.....	.....
6 Berlin	Peck memorial	1829	1901	free	2,903	.....	80	180	7
7 Berlin	East Berlin library	1899	.....	subscription	.....	.....	.....	.....	.....
8 Bethel	Bethel free public	1909	1909	free	4,466	97	115	1,392	.....
9 Bethlehem	Bethlehem free public	1857	1899	free	2,354	8	65	80	4
10 Bloomfield	Prosser library	1901	1902	free	5,457	145	180	600	32
11 Bolton	Bolton public	1914	1914	free	1,328	34	155	154	6
12 Branford	James Blackstone memorial	1896	.....	free	36,878	1,925	155	2,608	.....
13 Bridgeport	Bridgeport public	1881	.....	free	72,837	5,224	87	15,058	.....
14 Bridgewater	Bridgewater library	1905	1905	free	2,635	.....	207	100	6
15 Bristol	Bristol public	1892	1897	free	35,863	2,174	196	5,296	.....
16 Brooklyn	Brooklyn public	1890	1900	free	5,637	85	77	.....	4
17 Burlington	Burlington public	1896	1896	free	1,684	.....	.....	50	2
18 Canaan	David M Hunt library	1891	.....	subscription	4,609	105	.....	22	.....
19 Canton	Canton public	1913	1913	free	2,640	124	53	1,441	.....
20 Canton	North Canton	1912	.....	free	.....	.....	.....	.....	.....
21 Chaplin	William Reas public	1901	1901	free	1,737	.....	85	35	1
22 Cheshire	Cheshire public	1892	1904	free	7,008	197	11	7700	.....
23 Chester	Chester public	1895	1895	free	5,756	110	105	600	.....
24 Clinton	Clinton free public	1910	1910	free	4,068	6	5	1,268	4
25 Colchester	Cragin memorial	1856	1904	free	6,326	142	149	.....	.....
26 Columbia	Saxton B Little free	1883	1896	free	6,950	49	117	100	.....
27 Cornwall	Cornwall library association	1869	.....	subscription	.....	.....	.....	.....	.....
28 Cornwall	West Cornwall library association	1889	.....	.....	.....	.....	.....	.....	.....
29 Coventry	Booth and Dimock memorial	1880	1907	free	4,789	75	147	290	1
30 Coventry	Porter library association	1886	.....	free	905	61	.....	45	.....
31 Coventry	Hale donation library	1804	.....	free	1,744	29	.....	6	.....
32 Cromwell	Belden library association	1888	1913	free	3,810	30	10	.....	.....

* approximate

PUBLIC LIBRARIES.

53

OF LIBRARIES, 1918

STATISTICS OF BOOKS CIRCULATED					days and hours of opening	access to shelves	name of librarian or officer reporting	post office	
non-fiction	fiction	children's stories	other books for children	total					
8,661	22,926	10,831	12,206	56,614 (a)	Daily 9 AM-9 PM; Sun Oct-May 2-5 PM	yes	Anne Richards	Ansonia	1
118	1,658	408	287	2,471	Daily Fri 6-8 PM	yes	O P Durkee, member library committee	Warrenville	2
240	500	440	800	1,980	Wed 2-5, 7-8 PM	yes	Mrs C B Hadsell	Avon	3
1,448	10,759	2,855	870	15,932	Fri 2-5 PM	yes	Emily Brandegee	Berlin	4
55	1,324	484	289	2,352	Wed 7-8 PM; Sat 4-6 PM	yes	Marjorie Moore	Kensington	5
1,414	8,276	3,482	800	13,972	Wed and Sat 2-5, 7-9 PM	yes	Georgiana E Kelsey	East Berlin	6
298	1,112	445	194	2,047	Sat 2-5 PM	yes	Mrs Frances R Coulter	Bethel	7
20,328	25,638	18,244	10,685	74,892	Mon, Wed, Sat, 2-6, 7-9 PM	yes	Mrs May A Johnson	Bethlehem	8
41,884	86,104	68,760 (c)	197,196 (b)	74,892	Daily except Sun, 8.30 AM-9 PM	partial	Grace L Hayes	Bloomfield	9
600	1,600	500	250	2,850	Sat 2-5, 7-8 PM, often Thurs afternoon	yes	Adelia N Loomis	Bolton	10
13,442	59,942	26,201	11,624	111,210	Daily except Sun 9 AM-9 PM	yes	Charles N Baxter	Branford	11
559	3,257	1,227	1,152	6,295	Daily 9 AM-9.30 PM; Sun 2-9 PM	partial	Henry N Sanborn	Bridgeport	12
310	936	22	1,268	13,873	Wed and Sat, 4-6, 7-9 PM; Fly-Nov 1 7-9 PM only	yes	Phillips B Warner, assistant	Bridgewater	13
2,530	7,802	2,277	1,264	13,873	Daily except Sun 9 AM-9 PM	yes	Charles L Wooding	Bristol	14
127	372	262	226	988	Sat 9-12 AM, 2-5 PM	yes	Rev Geo F Genung	Brooklyn	15
2,400	6,791	575	903	10,669	Sun 12-2 PM	yes	John A Reeve	Unionville and 2	16
552	5,265	1,941	373	8,262	Mon, Wed, Sat, 2-5, 6-9 PM	yes	Mrs W R Hubbell	Falls Village	17
240	5,068	1,668	203	7,164	Wed and Sat, 2-5, 6.30-8.30 PM	yes	Marion L Bailey	Collinsville	18
1,663	4,427	2,568	1,764	10,772	Wed 7-9 PM; Sat 4-5 and 7-9 PM; Nov-May Wed only	yes	Mrs Myrtle Lanphear	Chaplin	19
941	1,640	180 (c)	2,741	10,772	Tues and Fri 2-5, 7-9 PM	yes	Mary E Baldwin	Cheshire	20
328	2,270	760	304	4,586	Wed, Fri and Sat, 2-9 PM	yes	Mrs Theodore Foster	Chester	21
1,312	5,274	910 (c)	7,496	10,669	Mon, Wed and Sat 4-6, 7-9 PM	yes	Mabel L K Stevens	Clinton	22
2,530	7,802	2,277	1,264	13,873	Tues, Thurs and Sat, 2-5, 7-9 PM	yes	Mary A Leal	Colchester	23
127	372	262	226	988	Fri 3.30-4.30, 7.30-8.30 PM	yes	Mrs Lillian W Rice	Columbia	24
2,400	6,791	575	903	10,669	Tues and Sat 2.30-9 PM; Thurs 2.30-6.30 PM	yes	E Gertrude Colburn	South Coventry	25
552	5,265	1,941	373	8,262	At any time	yes	Mrs Louise J Loomis	South Coventry	26
240	5,068	1,668	203	7,164	At any time	yes	Rev Harris C Beebe	South Coventry	27
1,663	4,427	2,568	1,764	10,772	Tues 2.30-5.30, 7-9 PM; Sat 7-9 PM	yes	Sarah Savage	Cromwell	28

(a) includes school circulation (b) includes 439 volumes issued for vacation reading (c) includes other books for children
 (d) includes 89 foreign books and 300 magazines

TABLE IV—STATISTICAL REPORT

TOWN	NAME OF LIBRARY	date of establishment	date of adoption of state grant	free or subscription	number of volumes	ADDITIONS DURING YEAR		number of book takers	number of families
						by purchase	by gift		
33 Danbury	Danbury library	1869	1913	free	24,775	1,836	468	4,076	.....
34 Darien	Darien free	1901	1902	free	6,108	.....	50	876	2
35 Derby	Harcourt Wood memorial	1901	1901	free	21,126	671	265	2,544	.....
36 Derby	Derby Neck free	1896	1913	free	16,826	746	80	875	2
37 Durham	Durham public	1894	1894	free	6,440	38	50	386	10
38 Eastford	Eastford public	1896	1896	free	2,931	.....	170	80	.....
39 East Haddam	East Haddam public	1888	1894	free	7,949	.....	188	663	31
40 East Hampton	East Hampton public	1898	1898	free	6,756	140	203	350	.....
41 East Hampton	Middle Haddam public	1892	1911	free	3,376	177	280	116	4
42 East Hartford	East Hartford public	1896	1896	free	10,335	322	266	.....	.....
43 East Haven	East Haven free public	1909	1909	free	2,172	100	158	590	27
44 East Lyme	Niantic public	1888	1910	free	3,257	24	88	250	9
45 East Windsor	East Windsor library association	1849	1909	free	4,248	46	10	315	17
46 East Windsor	Warehouse Point library association	1875	1909	free	2,610	86	96	402	.....
47 Ellington	Hall memorial	1881	1896	free	6,480	138	94	1,020	1
48 Enfield	Enfield free public	1896	1896	free	7,768	387	9	2,184	.....
49 Essex	Essex library	1890	.....	subscription	*2,400	.....	.....	.....	.....
50 Essex	Ivoryton circulating	1871	.....	subscription	3,470	75	.....	60	.....
51 Fairfield	Fairfield memorial	1876	.....	free	9,543	436	255	2,875	8
52 Fairfield	Pequot library	1894	.....	free	41,911	283	217	491	.....
53 Farmington	Village library	1890	.....	free	8,501	70	261	.....	.....
54 Farmington	West End library	1902	1902	free	3,272	80	119	1,263	7
55 Glastonbury	Glastonbury free public	1895	1895	free	5,726	291	95	686	.....
56 Goshen	Goshen public	1901	1901	free	4,042	1	147	126	.....
57 Granby	Granby public	1887	1912	free	2,118	181	440	108	.....
58 Granby	Frederick H Cossitt library	1889	1900	free	8,990	245	104	110	.....
59 Greenwich	Greenwich library	1877	1916	free	10,518	824	406	2,287	.....
60 Greenwich	Perrot memorial	1905	.....	free	2,941	29	811	468	.....
61 Griswold	Slater library	1884	.....	free	4,398	78	.....	228	.....
62 Groton	Bill memorial	1888	.....	free	7,221	30	78	.....	.....

* approximate

PUBLIC LIBRARIES.

55

OF LIBRARIES, 1918

STATISTICS OF BOOKS CIRCULATED					days and hours of opening	access to shelves	name of librarian or officer reporting	post office
non-fiction	fiction	children's stories	other books for children	total				
8,189	53,989	30,818	11,609	104,585	Daily 9 AM-9 PM; Sun 2-5 PM	yes	Ella R McDowell	Danbury 33
399	3,885	2,660	410	7,354	Daily except Sun 2-6, 7-8 PM; Sat to 9 PM	yes	Emily Hall	Darien 34
6,481	22,111	14,966	13,966	58,544	Daily except Sun 9 AM-9 PM	yes	Emma E Lessey	Derby 35
2,215	11,731	3,299	1,434	18,679	Thurs and Sun 2-5 PM	yes	Mrs W G Shaw	Derby 36
					Tues and Sat 3-5, 7-9 PM	yes	Mrs Albert L Hall	Durham Center 37
157	515	380	168	1,220	Wed 3-5, 7-8.30 PM	yes	Lillian L Huntington	Eastford 38
2,023	3,194	2,108	2,094	10,349	Daily except Sun 2-8.30 PM	yes	Myra Cone Sweet	Moodus 39
911	4,013	3,134	735	8,693	Mon 7-9 PM; Wed 5-7 PM; Sat 2-6 PM	yes	Margery Abell	East Hampton 40
402	1,731	219	29	2,381	Sat 2.30-4.30 PM winter, 3.30-5.30 PM summer	yes	Ether H Taylor	Middle Haddam 41
1,114	13,085	4,592	943	19,784	Tues, Thurs and Sat 2-5.30 PM	partial	Jessie W Hayden	East Hartford 42
610	3,221	1,641	412	5,884	Thurs 3-5 PM; Sat 2-8.30 PM	yes	Lottie E Street	East Haven 43
1,723	2,810	507	311	5,351	Mon and Thurs 3-6 PM	yes	Anne M Bond	Niantic 44
250	3,562	1,221		5,083	Thurs 7-9 PM; Sat 2-5 PM, Sun 10.30-1, 7-8 PM	yes	S Wolcott Bissell	Warehouse Point 45
435	2,711	1,438	730	5,314	Wed 7-9 PM, Sat 2-5, 7-9 PM	yes	Sarah V Price	Warehouse Point 46
1,322	3,233	1,537		6,092	Daily except Sun and Thurs evenings, 1.30-5, 7-9 PM	yes	Alice E Pinney	Ellington 47
2,444	12,156	4,498	2,770	22,868	Tues, Wed, Fri, Sat, 2-9 PM; Jy and Aug 2-8 PM	yes	Lillian V Baily	Thompsonville 48
					Tues and Sat 6.30-8 PM; Thurs 3-5 PM	yes	Grace W Goddard	Essex 49
					Thurs 6.30-8 PM; Sat 2.30-5 PM	yes	Mrs Hattie Parmelee	Ivoryton 50
6,513	10,184	6,813	4,617	28,427	Daily except Sun 9 AM-6 PM 7-9 PM	yes	Florence J Burr	Fairfield 51
7,510		4,140		11,650	Daily except Sun 9 AM-9 PM	partial	Gertrude Whittemore	Southport 52
2,585	4,288	2,371		9,244	Wed and Sat 2.30-5, 7-9 PM	yes	Mrs T H Root	Farmington 53
2,179	6,790	2,613	1,326	12,908	Mon, Thurs, Sat 6-9 PM; Wed, Fri 4-6 PM; Jy and Aug only Thurs, Fri and Sat	yes	Elizabeth M Bridgeman	Unionville 54
1,747	3,644	3,727	1,158	10,276	Tues and Fri 3-5 7-9 PM	yes	Mrs C G Rankin	Glastonbury 55
3,279	2,185			5,464	Sat 2-9 PM	yes	Emma C Beardsley	Goshen 56
141	1,573	901	172	3,080	Wed 3-5 PM, Sat 4-5, 7-8 PM	yes	Elizabeth Clark	Granby 57
				2,310	Sat 6 hours	yes	Helen M Shaw	North Granby 58
1,391	18,039	5,743	2,713	32,091	Daily 9 AM-9 PM; Sun 2.30-6 PM	yes	Ella M Brush	Greenwich 59
629	4,520	3,044		8,193	Daily except Sun and Wed 2-5 PM; Wed 6.30-8.30 PM	yes	Mabel O Grumman	Stamford 60
103	3,905			4,008	Mon, Wed and Fri 6-8 PM; Tues and Thurs, 2-8 PM; Sat 2-9 PM	partial	Mabel E Wilcox	Jewett City 61
					Tues and Thurs 3-6 PM; Sat 2-7 PM	yes	Abbie M Clarke	Groton 62

(c) includes other books for children

(d) includes fiction

(e) includes children's stories

TABLE IV—STATISTICAL REPORT

TOWN	NAME OF LIBRARY	date of establishment	date of adoption of state grant	free or subscription	number of volumes	ADDITIONS DURING YEAR		number of book takers	number of families
						by purchase	by gift		
63 Groton	Mystic and Noank library	1892	.....	subscription	7,380	.....	.....	370	.....
64 Groton	Library of the Baptist church	1826	.....	free	1,169	.....	.....	372	2
65 Guilford	Guilford free	1888	.....	free	2,600	69	58	.....	.....
66 Haddam	Brainerd memorial	1887	.....	free	4,268	24	94	.....	.....
67 Hamden	Mt Carmel free public	1900	.....	free	2,927	16	154	303	1
68 Hampton	Hampton public	1895	1895	free	3,945	.....	.....	.....	.....
69 Hartford	Hartford public	1892	1917	free	*133,639	8,893	590	19,256	.....
70 Hartford	Watkinson library of reference	1858	.....	free	96,381	.....	.....	.....	.....
71 Harwinton	Theodore A Hungerford memorial	1912	1912	free	2,938	284	65	83	.....
72 Hebron	Hebron library association	1889	1899	free	4,286	.....	67	225	1
73 Huntington	Plumb memorial	1892	1896	free	16,419	.....	.....	.....	.....
74 Kent	Kent library association	1916	1916	free	535	100	355	195	.....
75 Killingly	Free public	1854	1899	free	11,600	342	22	2,068	.....
76 Lebanon	Jonathan Trumbull library	1896	1896	free	4,009	.....	.....	86	.....
77 Ledyard	Bill library	1867	.....	free	.....	.....	.....	.....	.....
78 Litchfield	Wolcott and Litchfield circulating	1862	1906	free	14,200	414	177	1,786	.....
79 Litchfield	Gilbert library	1892	.....	free	.....	.....	.....	.....	.....
80 Lyme	Lyme public library	1914	1914	free	3,075	15	344	.....	.....
81 Madison	E C Scranton memorial	1895	1900	free	10,327	1,025	101	.....	.....
82 Madison	East River library company	1874	.....	subscription	2,714	.....	8	23	.....
83 Manchester	Manchester public	1895	1898	free	5,574	296	95	2,254	.....
84 Manchester	South Manchester free	1871	.....	free	.....	.....	.....	.....	.....
85 Mansfield	Mansfield center library	1906	1911	free	1,849	58	243	400	.....
86 Meriden	Curtis memorial	1898	1898	free	25,671	527	86	13,101	.....
87 Middlebury	Middlebury public	1896	1896	free	2,417	63	35	.....	.....
88 Middlefield	Levi E Coe library association	1893	1895	free	7,000	162	208	.....	.....
89 Middletown	Russell library	1874	1917	free	*20,000	497	483	78	.....
90 Milford	Taylor library	1894	1895	free	13,895	315	230	.....	.....
91 Montville	Raymond library	1884	.....	free	6,372	223	2	350	.....
92 Morris	Morris public	1900	1900	free	2,841	.....	116	50	.....

* approximate

PUBLIC LIBRARIES.

57

OF LIBRARIES, 1918

STATISTICS OF BOOKS CIRCULATED					days and hours of opening	access to shelves	name of librarian or officer reporting	post office	
non-fiction	fiction	children's stories	other books for children	total					
				4,096	Tues and Thurs 2-5.30 PM; Sat 2-5.30, 7-8.30 PM; Jy and Aug 10-12 AM same days	partial	Genevra E Ricker	Mystic	63
					Daily, all day	yes	W O Rathbun	Noank	64
					Tues 3-4.30 PM; Wed and Sat 7-8.30 PM	yes	Mrs Martha Cornell President	Guilford	65
175	1,639	789	72	2,675	Wed and Sat 3-8 PM	yes	Mrs G A Dickinson	Haddam	66
428	1,657	1,957	397	4,439	Tues and Sat 3-5.30, 7-8.30 PM; Thurs 3-5.30 PM	yes	Laura L Dickerman	Mt Carmel	67
					Sat 3-5 PM	yes	Kate A Thompson	Hampton	68
4,240	118,444	31,466	21,404	237,554	Daily 9 AM-8 PM; Sat 9 AM- 9 PM	partial	Caroline M Hewins	Hartford	69
					Daily 9 AM-5 PM	yes	Frank B Gay	Hartford	70
325	979	61	104	1,469	Wed and Sat 1.30-5 PM; Sun 12.30-1.30 PM	yes	Mrs Ella A Catlin	Torrington n d 3	71
417	998	1,298	323	3,081	Tues and Fri 2-5, 7-9 PM	yes	Caroline E Kellogg	Hebron	72
					Daily 10 AM-9 PM	yes	Jessamine Ward	Shelton	73
268	1,962	794		3,084	Wed and Sat 3-9 PM	yes	Mrs A L Tuttle	Kent	74
2,709	13,469	7,755	1,446	25,379	Daily 1-9 PM	yes	E R Warren,	Danielson	75
					Sat 2-5, 6-8 PM	yes	Mary E Standish, assistant librarian	Lebanon	76
						yes	Mrs Ursula E Avery	Norwich n d 6	77
2,604	14,275	3,748	1,069	21,686	Daily except Sun 10-12.30, 2.30-6 PM; Thurs 7.30- 9 PM in addition	yes	Katharine Baldwin	Litchfield	78
									79
198	945	117	468	1,728	Sun; alternate Wed	yes	Mrs Lizzie M Bill	Lyme	80
3,988	8,108	4,401 (c)		16,535 (f)	Daily, Dec to May 2-9 PM; May to Dec 9-12 AM, 2- 9 PM; Sun 2-6 PM	yes	Evelyn Meriwether	Madison	81
				308	Daily except Sun winter 2.30-7 PM; summer 2.30- 5, 6-8 PM	yes	Maude Blakeman	East River	82
757	8,447	5,254	1,123	15,881	Mon, Wed, Sat 7-9 PM; Tues, Thurs, Sat 3-6 PM	yes	Mrs Gertrude Boynton	Manchester	83
					Daily 3-6, 7-9 PM; child- ren's dep't 3-6 PM	yes	Louise L Bartlett	So Manchester	84
675	1,590	678	906	4,256	Tues 3-5 PM; Sat 7.30-9 PM	yes	Elsie G Marsh	Mansfield Center	85
4,885	14,958	7,506	4,880	32,228	Daily except Sun 10 AM-9 PM	yes	Corinne A Debon	Meriden	86
43 (c)	490 (c)			533	At any time	yes	F S Chamberlain	Middlebury	87
192	985	1,431	150	2,758	Wed and Sat 1-5 PM	yes	Alice E Watrous	Middlefield	88
9,613 (c)	27,265 (e)			36,878	Daily except Sun 10-12, 2-6, 7-9 PM	yes	Edna H Wilder	Middletown	89
8,278 (d)		4,132 (c)		20,410	Daily except Sun and Wed pm 9 AM-12.30 PM, 2.30- 5, 7-9 PM	yes	Rev Howard C Meserve	Milford	90
				4,546	Sat 2-4 PM	yes	Mrs Lucy P Schofield	Montville	91
					Wed and Sat, 2 hrs each	yes	Mrs Louis Towne	Morris	92

(b) includes other books for children (d) includes fiction (e) includes children's stories (f) includes 36 foreign books
(g) includes 408 periodicals

TABLE IV—STATISTICAL REPORT

TOWN	NAME OF LIBRARY	date of establishment	date of adoption of state grant	free or subscription	number of volumes	ADDITIONS DURING YEAR		number of book takers	number of families
						by purchase	by gift		
93 Naugatuck	Howard Whittemore memorial	1888		free	14,187	455	56		
94 New Britain	New Britain Institute	1853	1901	free	*67,000	6,453	583	11,986	
95 New Canaan	New Canaan library	1877	1895	free	10,712	114	226	1,050	6
96 New Fairfield	New Fairfield free	1897	1897	free	1,265		59	28	
97 New Hartford	New Hartford free public	1906	1906	free	4,260		222	390	
98 New Haven	New Haven free public	1886		free	*139,000	11,478	729	27,940	
99 New Haven	Donald Grant Mitchell memorial	1910		free	3,037		634	1,609	
100 New Haven	Young men's institute	1826		subscription	28,034	645	21		4
101 Newington	Newington public	1894	1895	free	3,669	2	53	313	1
102 New London	Public library of New London	1891		free	38,503	1,158	151	8,284	
103 New Milford	New Milford public	1886	1907	free	11,436	422	134	350	1
104 New Milford	Phoenix library	1829		subscription					
105 Newtown	Beach memorial	1876		subscription	5,375	51	74	105	
106 Newtown	Sandy Hook free public	1897		free	2,519	39	22	123	1
107 Norfolk	Norfolk library	1888		free	20,454	715	104		
108 North Canaan	Douglas library	1821	1895	free	4,880	92	47	225	1
109 North Haven	Memorial library	1884	1902	free	5,766	108	22		
110 No Stonington	Wheeler library	1908	1915	free	*5,800	114	206	410	1
111 Norwalk	Norwalk public	1896		free	13,323	750	101	3,875	
112 Norwalk	South Norwalk public	1878		free	13,446	366	47	3,000	
113 Norwalk	Rowayton library	1903		free	3,282		81		
114 Norwalk	East Norwalk improvement association public	1915		free	1,117	33	272	184	
115 Norwich	Otis library	1850	1906	free	44,435	2,229	195		
116 Old Lyme	Phoebe Griffin Noyes memorial	1874	1912	free	8,221	139	153	465	1
117 Old Saybrook	Acton library	1854	1904	free	*7,700	18	340		
118 Orange	West Haven public	1906	1906	free	4,041	189	117	993	
119 Oxford	Oxford library			free					
120 Plainfield	Aldrich free public	1896	1913	free				*350	1
121 Plainfield	Plainfield library association		1918	free					
122 Plainville	Plainville public	1894	1894	free	3,612	134	97	165	

* approximate

† new readers

PUBLIC LIBRARIES.

59

OF LIBRARIES, 1918

STATISTICS OF BOOKS CIRCULATED					days and hours of opening	access to shelves	name of librarian or officer reporting	post office
non-fiction	fiction	children's stories	other books for children	total				
2,908	11,431	13,041	2,381	29,851	Mon, Wed, Sat 3-5, 7-9 PM; Thurs and Fri 3-5 PM	partial	Miss E M Goodyear	Naugatuck 93
7,967	73,550	31,170	36,759	203,723	Daily except Sun 9 AM-9 PM	partial	Anna G Rockwell	New Britain 94
1,293	6,552	2,084	474	10,405	Week days 10 AM-1 PM, 2-6, 7-9 PM; Sun 2-6 PM	yes	Stella Waters	New Canaan 95
82	552	217	78	929	Sat 2-4 PM	yes	Mrs C H Williams	Danbury & D 96
270	1,207	1,000	1,573	4,050	Wed 3-5 PM; Sat 7-9 PM	yes	Mrs F B Munn	New Hartford 97
98,007	206,286	154,197	76,537	535,127	Daily except Sun 9 AM-9 PM	yes	Willis K Stetson	New Haven 98
				42,906	Daily except Sun 1-9 PM; August 4-5 PM	yes	Herbert F Larkin	New Haven 99
6,870	27,165	968	92	35,095	Daily except Sun 9 AM-7 PM	yes	Abigail D Dunn	37 Harrison St New Haven 100
258	1,994	1,303	301	3,856	Wed 3.15-7 PM; Sat 2.30-7 PM	yes	Ida L Kallogg	847 Chapel St New Britain and 2 101
18,994	41,130	15,532	12,326	87,981	Week days 10 AM-9 PM; Sun 2-9 PM	yes	Frederick W Edgerton	New London 102
1,604	16,630	5,803	971	31,235	Daily except Sun 2-5.30, 7-9 PM	yes	Elizabeth H Noble	New Milford 103
								104
2,750	3,800	2,350	900	9,800	Tues and Sat 1.30-9 PM	yes	Abbie L Peck	Newtown 105
				2,696	Sat 3-5, 7-8 PM	yes	Mrs H Birdsey Sniffen	Sandy Hook 106
2,215	6,686	4,192 (c)		15,093	Daily except Sun 9 AM-12 M 1.30-6, 7-9 PM	yes	Ellis Sylvernale	Norfolk 107
1,150	3,679	1,489 (c)		6,318	Wed and Sat 2-5, 7-9 PM	yes	Mrs Nellie A Preston	Canaan 108
735	4,456	1,729	207	7,127	Tues and Sat 2-4.30, 7-9 PM	yes	Clara E Bradley	North Haven 109
1,780	2,549	1,413	589	6,331	Daily except Sun 2.30-5 PM	yes	Mrs Edna H Tryon	No Stonington 110
1,069	28,675	5,915	1,034	41,393	Daily except Sun 9.30 AM-1 PM, 2.30-6, 7.30-9 PM	yes	Dotha Stone Pinneo	Norwalk 111
1,815	19,423	5,063	1,899	30,220	Week days 9 AM-9 PM; Jy and Aug 9 AM-3 PM; Sun 2.30-5.30 PM	yes	Mrs Agnes E Blanchard	South Norwalk 112
187	1,283	828 (c)		2,948	Sat 3.30-6, 7.45-8.15 PM	yes	M L Millhaugh, acting librarian	Rowayton 113
					Tues and Sat 3-6 PM		Mrs Ellis H Taylor	East Norwalk 114
631	72,326	18,499	6,650	114,106	Daily except Sun 9.30 AM-9 PM	yes	Imogene A Cash	Norwich 115
484	3,978	1,209	617	8,288	Mon and Wed 2-5, 7-9 PM; Tues, Thurs and Fri 2-5 PM; Sat 11-12.30 AM; 2-5, 7-9 PM	yes	Bessie Connolly	Old Lyme 116
307	2,972	851	131	5,961	Tues, Thurs, Sat 2-6, 7-8.10 PM (in summer 7-9)	yes	Lynda H Stannard, sub librarian	Saybrook 117
942	10,522	5,867	1,227	19,558	Tues, Thurs, Sat 2-9 PM	yes	Mrs Robert H Lewis	West Haven 118
							Ruth Sanford	Seymour & D 119
879	2,495	1,882 (c)		5,256	Wed and Sat 2-6, 7-9 PM	yes	Mrs Elmer Battay assistant librarian	Moosup 120
						yes	Mrs Ruth Devolve	Plainfield 121
738	3,562	1,637	391	6,328	Mon and Wed 2-5 PM; Sat 2-5.30, 7-9 PM	yes	Frances E Bunnell	Plainville 122

(h) includes 24,377 branch and school circulation
 (i) includes 5,063 school circulation and 1,155 branch circulation

TABLE IV—STATISTICAL REP.

TOWN	NAME OF LIBRARY	date of establishment	date of adoption of state grant	free or subscription	number of volumes	ADDITIONS DURING YEAR		number of book takers	number of
						by purchase	by gift		
123 Plymouth	Terryville free public	1895	1895	free	4,481	81	60	.....	.....
124 Plymouth	Plymouth library association	1870	.....	subscription	4,040	90	10	125	.....
125 Pomfret	Pomfret library	1882	.....	free	7,667	77	85	70	.....
126 Pomfret	Social library of Abington	1793	.....	free	.....	.....	.....	.....	.....
127 Portland	Buck library	1895	1895	free	6,366	125	51	300	.....
128 Preston	Preston public	1898	.....	free	1,896	49	8	.....	.....
129 Prospect	Prospect public	1886	1895	free	2,762	1	100	.....	.....
130 Putnam	Putnam free public	1894	1894	free	7,120	255	42	675	.....
131 Redding	Mark Twain library	1908	.....	free	5,549	64	84	65	.....
132 Ridgefield	Ridgefield library	1880	.....	subscription	10,089	114	180	394	.....
133 Rocky Hill	Rocky Hill library association	1794	.....	subscription	1,973	.....	.....	.....	.....
134 Roxbury	Roxbury public	1875	1896	free	2,611	.....	207	85	.....
135 Salem	Salem public	1914	1914	free	1,013	45	82	226	.....
136 Salisbury	Scoville memorial	1892	1902	free	11,739	114	425	720	.....
137 Saybrook	Deep River public	1899	1899	free	3,965	.....	66	723	.....
138 Scotland	Scotland free public	1895	1895	free	2,530	.....	74	50	.....
139 Seymour	Seymour public	1893	1893	free	7,806	96	269	877	.....
140 Sharon	Hotchkiss memorial	1893	.....	subscription	7,870	124	128	200	.....
141 Sharon	Everitt library	1869	.....	free	1,887	24	.....	21	.....
142 Sherman	Sherman public	.....	.....	.....	.....	.....	.....	.....	.....
143 Simsbury	Simsbury free	1874	.....	free	12,226	174	13	743	.....
144 Somers	Somers free public	1895	1895	free	4,025	.....	.....	85	.....
145 Southbury	South Britain public	1904	1904	free	3,145	120	.....	50	.....
146 Southington	Southington free public	1900	1900	free	7,931	171	87	.....	.....
147 South Windsor	South Windsor public	1898	1898	free	4,070	149	168	313	.....
148 South Windsor	Sadd memorial	1905	1905	free	2,748	104	123	.....	.....
149 Stafford	Stafford library association	1876		free	6,636	307	43		

* approximate

PUBLIC LIBRARIES.

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LIBRARIES, 1918

STATISTICS OF BOOKS CIRCULATED					days and hours of opening	access to shelves	name of librarian or officer reporting	post office
non-fiction	fiction	children's stories	other books for children	total				
2,633	4,474	2,304 (c)		10,311	Wed 4-5, 6.30-8.30 PM; Sat 3-5, 6.30-8.30 PM Mon and Fri evenings, 2 hrs each May to Nov Tues and Fri 10-12 AM; Nov to May Fri 2-4 PM	yes	Gertrude E Ella	Terryville 123
						yes	A J Hill president	Plymouth 124
						yes	Marion L Harvey	Pomfret 125
						yes	Mrs Phebe H Sharp	Abington 126
844	5,808	2,413 (c)		10,060	Wed 2-4.30 PM; Sat 2-4, 7-9 PM 746 Sun 1-2 PM; Wed and Sat 3-5, 7-9 PM 3,650 Sun 1-1.30 PM; Wed 3-5 PM	yes	W H Edwards, secy Mrs F M Robinson librarian	Portland 127
1,859	7,248	4,218	2,420	15,545	Daily except Sun 3-6, 7-9 PM	yes	Miss C Elida Hallett	Norwich & D 3 128
79	553	204 (c)		836	Mon and Wed 3-6 PM; Sat 3-6, 7-9 PM	yes	Mrs W E Clark	Waterbury & D 2 129
1,367	8,574	2,028	180	12,119	Daily except Sun 10-12 AM; 3-6, 7-9 PM Fri 2.30-4.30, 7-8 PM	yes	Emma J Kinney	Putnam 130
						yes	W E Grumman	Danbury & D 2 131
124	495	400	230	1,249	Wed 3.30-5, 7-9 PM; Fri 3.30-5 summer evenings only	yes	Jennie Smith	Ridgefield 132
89	838	467	201	1,595	Wed 4-6 PM; Sat 3-5, 7-8 PM	yes	Mrs Nellie C Warner	Rocky Hill 133
1,944	5,568	1,482	1,743	10,727	Daily 2-5.30 PM	yes	Rev W D Humphrey	Roxbury 134
583	3,718	1,515	657	6,473	Wed 3-5 PM; Sat 6.30-8 PM	yes	Mrs Helen M Malona	Salem 135
108	630	797 (c)		1,526	Fri 2-4, 7-8 30 PM; Sun 12-12.15 PM	yes	Charlotte B Norton	Salisbury 136
1,969	10,982	2,982	2,989	20,802	Mon, Wed, Fri, 2-6 PM; Tues, Thurs, Sat 2-6, 7-9 PM	yes	Mrs Lena A Bailey	Deep River 137
1,096	3,582	911 (c)		6,563	Daily except Sun Je 15-Oct 1, 10-12 AM, 3-5 PM; Oct 1-Je 15, 3-5 PM	yes	Mary A Smith	Scotland 138
				252		yes	Mrs Edyth M Adams	Seymour 139
							Mary C Mackey	Sharon 140
							Olive L Johnson	Sharon & D 2 141
							Ruth Rogers	Sherman 142
745	4,627	1,635	308	7,310	Wed and Sat 2-5, 6-9 PM	yes	Carrie L McRoy	Simsbury 143
610	2,229 (e)			2,839	Wed and Sat 2-5, 7-9 PM	yes	Ernest L Fuller, sec Augusta I Lombard, librarian	Somers 144
184	1,352	570	91	2,197		yes	Mrs C P Williams	South Britain 145
453	9,087	4,160	1,683	17,363	Tue, Thurs, Sat 3-5.30, 7-8.30 PM	yes	Mrs C H Bissell	Southington 146
				7,587	Mon and Thurs 2.30-5 PM	yes	Elvira C Clapp	South Windsor 147
				3,613	Tues and Fri 2-5 PM	yes	Mrs Gertrude A Foster	Wapping 148
823	9,774	4,134	1,905	17,736	Daily except Sun 2-6, 7-8.30 PM	yes	Anna Heald	Stafford Springs 149

(c) includes other books for children

(e) includes children's stories

TABLE IV—STATISTICAL REPORT

TOWN	NAME OF LIBRARY	date of establishment	date of adoption of state grant	free or subscription	number of volumes	ADDITIONS DURING YEAR		number of book takers	number of purchases
						by purchase	by gift		
150 Stamford	Ferguson library	1880	1911	free	32,922	2,844	244		
151 Stamford	Phillips-Francis library	1913	.....	free	2,486	165 (1)		470	
152 Stonington	Stonington free	1887	.....	free	7,492				
153 Stratford	Stratford library	1885	1896	free	17,622	382	387	*6,000	*2
154 Suffield	Kent memorial	1884	1894	free	19,563	168	133	1,299	
155 Thomaston	Thomaston public, or Laura Andrews free	1880	1898	free	6,652	252	167	728	
156 Thompson	Thompson public	1902	1903	free	4,868	11	129	263	
157 Thompson	New Boston library	1855	.....	subscription	2,243	36		20	
158 Tolland	Tolland public	1898	1899	free	2,971	5	120	100	
159 Torrington	Torrington library	1865	.....	subscription		1,021	42	1,845	
160 Union	Union free public	1894	1894	free	3,600			70	
161 Vernon	Rockville public	1896	1896	free	13,376	677	263	3,105	
162 Wallingford	Wallingford public	1881	1899	free	14,036	615	382	2,450	1
163 Warren	Warren public	1914	.....	free	933	10	37	100	
164 Washington	Gunn memorial	1881	.....	free	5,989	127	334		
165 Waterbury	Silas Bronson library	1869	.....	free	103,624	7,156	382	9,032	
166 Watertown	Watertown library association	1865	.....	free	9,736	456	19	900	
167 Watertown	Oakville library	1914	1914	free	1,233	125	81	336	
168 Westbrook	Westbrook public	1895	1895	free	4,956	4	48	625	
169 West Hartford	West Hartford free	1883	1897	free	5,497	469 (1)		712	
170 Westport	.....	1884	1908	free	9,535	645	205	3,376	
171 Wethersfield	Wethersfield public	1894	1894	free	*7,223	117	106	300	
172 Wilton	Wilton library association	1895	.....	subscription	2,345	20	207	132	
173 Winchester	Beardsley library	1874	1899	free	14,369	489	7	4,798	
174 Winchester	Gilbert school library	1895	.....	free	11,124	426	37	2,467	
175 Windham	Windham free public	1897	1916	free	2,778	33	95	172	

* approximate

(1) includes children's stories

LIBRARIES, 1918

STATISTICS OF BOOKS CIRCULATED					days and hours of opening	access to shelves	name of librarian or officer reporting	post office
non-fiction	fiction	children's stories	other books for children	total				
5,478	63,269	24,232	26,668	139,647	Daily except Sun 9 AM-9 PM	yes	Alice M Colt	Stamford 150
				6,080	Sun in winter 2-6 PM	yes	Mrs F L MacLeod	Glenbrook 151
					Daily except Sun 3-6, 7-9 PM	yes	Mrs Kate Hahn	Stonington 152
					Daily 10-12 AM, 2-4 PM; Tues, Thurs and Sat 7-8.30 PM	yes	Frances B Russell	Stratford 153
4,251	13,665	6,553	2,538	27,007	Daily except Sun 10-12 AM, 2.30-5.30, 7-8.30 PM	yes	Madeline H Spencer	Suffield 154
1,761	6,660	2,671	834	11,926	Daily except Sun 2-5.45, 6.45-8 PM; Sat 9 PM	by permission		
914	9,476	3,080	1,474	14,944	Tues, Thurs, Sat 2-5, 7-9 PM	partial	Martha E Potter	Thomaston 155
2,826	2,843	1,461		7,130	Tues and Fri 2-5, 7-9 PM	yes	Harriet R Lewis	Thompson 156
463		(c) 11		474	Thurs 4.30-6 PM	yes	Gladys May	Fabyan 157
d) 453	1,532	(c) 603		2,590	Tues 7-9 PM; Sat 2-5 PM	yes	Lucile Agard	Tolland 158
1,475	42,865	20,049	16,246	95,635	Daily except Sun 1.30-9 PM	partial	Louise T Mason	Torrington 159
				960	Wed and Sun 1-4 or 5 PM	yes	Leonard Wilkins	Stafford Springs 160
875	25,183	11,765	5,857	50,680	Daily except Sun 10 AM-6 PM, 7-9 PM; Sun Nov-May 2-5 PM	yes	Edith M Peck	R D C Rockville 161
398	22,571	10,301	4,855	45,425	Daily except Sun 10 AM-9 PM	yes	Minnie E Gedney	Wallingford 162
154	655	98	26	933	Sat 2-5 PM	yes	Marion B Kingman	Cornwall Bridge 163
672	3,902	1,023	611	7,833		yes	Fanny P Brown	R D 1 Washington 164
419	36,364	48,285	38,023	263,111	Daily except Sun 9 AM-9 PM	partial	Helen Sperry	Waterbury 165
553	7,111	2,453	1,636	12,753	(j) Oct-Apr Sun 2-6 PM	yes	Jennie M Smith	Watertown 166
471	2,837	3,706	2,116	9,130	Mon, Wed, Fri, 2-6, 7-8.30 PM	yes	Marion K Cooper	Oakville 167
146	2,702	723	473	5,144	Tues, Sat 2-5 PM	yes	Lynda H Stannard	Westbrook 168
				8,988	Mon, Wed, Sat 3-5, 6.30-8.30 PM	yes	Elizabeth S Elmer	West Hartford 169
123	17,455	6,160	1,868	33,866	Daily except Sun 9 AM-9 PM	yes	Mrs Edith Very	Westport 170
					Mon, 7-9 PM; Wed 2-5 PM; Sat 2-5, 7-9 PM	yes	Sherwood Belle Brigham	Wethersfield 171
				about 1900	Wed and Sat 2-5 PM	yes	Ethel Hart	Wilton 172
45	20,709	7,656	3,299	35,109	Daily except Sun 1.15-6, 7-9 PM	yes	Dorothy Whiting	Winsted 173
94	7,427	3,149	2,214	16,974	Mon, Tues, Thurs, Fri 8.30 AM-1.30 PM; Wed 8.30 AM-1.30 PM, 2-9 PM; Sat 2-9 PM	yes	Grace A Child	Winsted 174
58	1,220	1,625		3,233	Sat 2-5 PM; Fri Oct-Je 12-1 PM	yes	Grace P Bates	Windham 175

c) includes other books for children
 f) includes 53,020 school, branch and playground circulation

(d) includes fiction
 (e) includes children's stories

PUBLIC LIBRARIES.

TABLE IV—STATISTICAL REPORT

TOWN	NAME OF LIBRARY	date of establishment	date of adoption of state grant	free or subscription	number of volumes	ADDITIONS DURING YEAR		number of book takers	number of families
						by purchase	by gift		
176 Windham	Willimantic public	1871	1913	free	9,658	180	50		
177 Windham	Dunham Hall library	1878	.....	free	6,534			860	7
178 Windsor	Windsor public	1888	1896	free	4,497	29	88	690	
179 Windsor Locks	Windsor Locks public	1907	1907	free	4,389	64	114		
180 Wolcott	Wolcott public	1916	1916	free	306		24	40	
181 Woodbury	Woodbury public	1850	1897	free	4,200	167	300		
182 Woodstock	Woodstock library association	1878	1907	free	5,167		77	122	
183 Woodstock	East Woodstock library association	1875	1907	free	1,439	2	54	112	
184 Woodstock	West Woodstock library association	1889		subscription					

PUBLIC LIBRARIES.

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OF LIBRARIES, 1918

STATISTICS OF BOOKS CIRCULATED					days and hours of opening	access to shelves	name of librarian or officer reporting	post office
non-fiction	fiction	children's stories	other books for children	total				
4,945	28,146	4,349	1,742	34,182	Daily except Sun 2-9 PM	partial	Mrs Bell B Riggleman	Willimantic 176
478	9,225	5,022 (c)		14,725	Daily except Sun 12-6, 7-9 PM	yes	Mrs Hattie B Gates	Willimantic 177
736 (c)	4,810 (c)			8,746	Tues and Thurs 3-5.30 PM; Sat 7-9 PM	yes	Kate Putnam Safford	Windsor 178
371	3,829	1,823	664	6,687	Daily except Sun 6.30-9 PM Wed and Sat 3-5 PM	yes	Alice E Coffin	Windsor Locks 179
					Wed	yes	Mrs L H Merrill	Waterbury R D 1 180
605	4,983	3,289	1,379	10,256	Wed and Sat	yes	Edward S Boyd	Woodbury 181
310	703	152	354	1,519	Thurs 3-5 PM (Nov-May); Mon and Thurs 3-5 PM (May-Nov)	yes	Mrs Louise L Child	Woodstock 182
				1,065	Tues 3-5 PM	yes	Mrs Lillian A May	East Woodstock 183
								184

(c) includes other books for children

(e) includes children's stories

(k) includes 2,735 branch circulation

TABLE V—EXPENSES OF LIBRARIES, 1916

TOWN	INCOME		EXPENSES				LIBRARY BUILDING		
	amount	sources	salaries	books and periodicals	other expenses	total	year erected	cost	name of donor
1 Andover	\$ 96.72	town appropriation, invested funds, fines	\$25.00	\$20.70	\$6.17	\$51.87			
2 Ansonia	6,254.19	town appropriation, invested funds, fines	2,009.49	1,029.20	2,383.69	5,422.38	1891	\$67,000	Caroline Phelps Stokes
3 Ashford	120.00	invested funds	35.00	85.00		120.00	1889	400	Archibald Babcock
4 Avon	103.00	town appropriation, fines	26.00	39.00	38.04	103.04			
5 Berlin	176.85	town appropriation, membership fees, invested funds, fines, gifts	40.00	72.03	48.67	160.70	1892	1,300	subscriptions
6 Berlin	89.78	town appropriation, and other sources	5.00	9.65	38.80	53.45	1901	1,000	Henry H Peck
7 Berlin	17.75	subscriptions, fines		12.75		12.75			
8 Bethel	1,579.31	town appropriation, invested funds, fines, gifts, ladies' auxiliary	150.00	131.92	2,045.76	2,327.68	1915	Seelye home-stead remodelled	Seelye family
9 Bethlehem	62.33	town appropriation, fines, other sources	25.00	34.89	3.80	63.69			
10 Bloomfield	685.48	town appropriation, invested funds, fines	200.00	367.92	59.59	627.51			has room in town hall
11 Bolton	110.76	town appropriation, entertainments	35.00	18.20	44.56	97.76	1914	7,000	Bolton hall and library, built by contributions of citizens
12 Branford	19,655.42	invested funds, fines, entertainments, other sources	3,559.14	2,682.64	8,179.45	14,421.23	1896	400,000	Timothy B Blackstone
13 Bridgeport	29,625.09	city appropriation, fines	9,204.78	7,559.69	10,864.64	27,649.11	1882	225,000	Mrs. Catherine Pettingill
14 Bridge-water	131.62	town appropriation, fines, gifts	38.00	40.00	54.50	118.50			
15 Bristol	8,830.51	town appropriation, invested funds, fines, other sources	3,878.96	1,993.22	2,946.67	8,818.85	1907	47,000	citizens of Bristol
16 Brooklyn	282.14	town appropriation, invested funds, fines, gifts, other sources	50.00	151.98	95.36	297.34	1914	1,900	remodelled barn building; large number of subscribers
17 Burlington	50.00	town appropriation	25.00	12.40	12.60	50.00			
18 Canaan	1,100.00	subscriptions, invested funds	273.00	129.70	579.01	981.71	1891	10,000	Wealthy A. and Catherine E. Hunt
19 Canton									
20 Canton	291.09	town appropriation, invested funds, fines, other sources	80.50	76.39	77.04	333.93			
21 Chaplin	139.98	town appropriation, invested funds, fines	25.00	5.15	74.46	104.61	1911	6,000	William Ross
22 Cheshire	506.00	town appropriation, invested funds, fines	250.00	326.90	16.90	593.80	1911		remodeled house given by G C F Williams
23 Chester	524.89	town appropriation, fines	150.00	110.03	293.74	553.77	1907		S Mills Ely
24 Clinton	511.11	town appropriation, membership fees, subscriptions, fines, gifts, entertainments	200.00	176.71	215.41	592.12			

PUBLIC LIBRARIES.

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TABLE V—EXPENSES OF LIBRARIES, 1916—continued

TOWN	INCOME		EXPENSES				LIBRARY BUILDING		
	amount	sources	salaries	books and periodicals	other expenses	total	year erected	cost	name of donor
25 Colchester	666.28	town appropriation, invested funds, fines, gifts, other sources	154.10	71.15	417.52	642.77	1905	16,000	Edwin B Cragin, M D
26 Columbia	120.88	invested funds, fines	50.00	58.61	12.27	120.88	1903	2,749.12	Saxton B Little and others
27 Cornwall	253.61	subscriptions, invested funds, fines, gifts	75.00	133.69	76.40	285.09	1908	25,000	John E Calhoun
28 Cornwall	20.46	subscriptions			8.21	8.21			
29 Coventry	40.00	invested funds	10.00	30.00		40.00			
30 Coventry	771.57	town appropriation, invested funds, fines	200.04	124.89	551.47	876.40	1913		H F Dimock
31 Coventry	41.41	invested funds			.10	.10			
32 Cromwell	130.43	town appropriation, fines	100.00	60.31	96.27	256.58			
33 Danbury	8,426.81	town and city appropriation, invested funds, fines, other sources	2,661.77	863.29	4,516.74	8,041.80	1879	30,000	E Morse White's family
34 Darien	496.30	town appropriation, membership fees, fines, gifts, entertainments	187.50		376.87	564.37			
35 Derby	5,159.75	town appropriation, invested funds, fines, gifts, other sources	2,390.01	556.51	1,839.08	4,785.60	1903	50,000	Mr and Mrs Holton Wood
36 Derby	1,009.50	town appropriation, membership fees, invested funds, fines, gifts		952.59	335.98	1,288.57	1907	3,400	Wm F Osborne and Andrew Carnegie
37 Durham	511.00	town appropriation, invested funds, fines, entertainments	200.00	125.61	141.56	467.17	1902	5,000	citizens of Durham
38 Eastford	110.83	town appropriation, invested funds, fines, entertainments, other sources	20.00	8.00	31.07	59.07			
39 East Haddam	600.00	town appropriation, fines, gifts	300.00	66.07	233.93	600.00	1911	1,000	house formerly rented, bought by library association
40 East Hampton	500.34	town appropriation, fines, gifts, other sources	293.26	124.39	123.22	540.87	1898	400	subscriptions; mantle and fireplace by S Mills Bevin
41 East Hampton	314.64	town appropriation, invested funds, fines	37.05	137.89	127.80	302.74			
42 East Hartford	1,293.23	town appropriation, fines	784.92	371.94	218.56	1,375.42	1889	10,000	Albert C Raymond
43 East Haven									
44 East Lyme	173.20	town appropriation, membership fees, fines, gifts, entertainments		39.45	39.69	79.14			
45 East Windsor	101.14	town appropriation, fines		59.34	14.43	73.77			
46 East Windsor	506.53	town appropriation, invested funds, fines	88.74	32.79	44.25	165.78			
47 Ellington	1,092.06	town appropriation, invested funds, fines, other sources	250.00	53.50	303.50	880.60	1903	50,000	Francis Hall

TABLE V—EXPENSES OF LIBRARIES, 1916—continued

TOWN	INCOME		EXPENSE				LIBRARY BUILDING		
	amount	sources	salaries	books and periodicals	other expenses	total	year erected	cost	name of donor
48 Enfield	2,075.00	town appropriation, fines	643.25	245.54	956.07	1,844.86	1912	20,000	Andrew Carnegie
49 Essex							1898	2,500	Capt Joseph Tucker
50 Essex							1890	5,000	site by Harriet E Comstock building by Ladies' sewing circle and subscriptions
51 Fairfield	2,448.00	invested funds, gifts	1,157.55	560.43	664.78	2,391.76	1903	29,000	public subscription
52 Fairfield	3,149.49	subscriptions, invested funds, fines, gifts, entertainments, other sources	900.00	783.23	1,607.83	3,201.06	1887	75,000	Mr and Mrs E B Monroe
53 Farmington	830.59	town appropriation, invested funds, fines	100.00	98.32	669.42	867.74			
54 Farmington	816.84	other sources membership fees, invested funds, fines	150.00	114.49	187.20	451.69			
55 Glastonbury	320.81	town appropriation, fines	62.00	53.71	204.60	320.31			
56 Goshen	154.42	town appropriation, invested funds, fines	50.00	35.63	53.13	138.76			
57 Granby		gifts							
58 Granby	173.55	invested funds, other sources	65.00	77.25	22.84	165.09	1890	3,500	Frederick H Comitt
59 Greenwich	2,650.01	invested funds, fines, gifts	1,209.32	592.80	818.90	2,621.02	1895	25,000	Mrs E M Anderson
60 Greenwich			104.00	20.00	27.00	151.00			
61 Griswold	786.32	fines, gifts, entertainments, other sources	300.00	203.08	283.79	786.87	1885	8,000	W. A. Slater
62 Griswold									
63 Groton	760.00	invested funds	275.00	136.39	238.60	649.99	1889	40,000	Frederick B.
64 Groton							1892	10,000	Elihu Spicer
65 Groton									
66 Guilford					32.00	32.00	1891	1,500	E P Dickie and others
67 Haddam							1908	25,000	Cyprian S Brandard, Jr
68 Hamden	168.48	membership fees, invested funds, fines, gifts, entertainments		108.83	63.81	167.64			
69 Hampton	137.33	invested funds, fines	25.00	62.72	11.69	99.41			
70 Hartford	3,024.73	city appropriation, invested funds, fines	15,794.16	8,283.79	5,818.44	29,896.39	re-mod 1891 1892	200,000	occupies part of Wadsworth Athenaeum
71 Hartford		subscriptions							
72 Harwinton	455.77	invested funds	200.00	109.49	158.22	467.71	1912		Theodore A Hungerford
73 Hebron	104.04	town appropriation, invested funds, fines, gifts, entertainments	40.00	19.16	41.50	100.65	1898	1,000	various donors money and vol

PUBLIC LIBRARIES.

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TABLE V—EXPENSES OF LIBRARIES, 1916—*continued*

TOWN	INCOME		EXPENSES				LIBRARY BUILDING		
	amount	sources	salaries	books and periodicals	other expenses	total	year erected	cost	name of donor
74 Huntington,	4,149.02	town appropriation, invested funds, fines, other sources	1,554.45	681.80	1,913.27	4,149.02	1895	30,000	David W Plumb, by Horace S Plumb
75 Kent									
76 Killingly	1,549.65	town and city appropriation, fees, invested funds, fines, gifts	529.60	306.33	637.37	1,473.30	1903	15,000	Edwin Holmes Bugbee
77 Lebanon	103.25	town appropriation, fines	50.00	59.14	25.39	134.53			What is known as "War Office" loaned by SAR for use of library
78 Ledyard	257.58	invested funds	25.00	27.00	28.66	80.66	1891	4,000	Bill Brothers
79 Litchfield	2,244.95	town appropriation, invested funds, fines, gifts	795.10	624.60	787.76	2,207.46	1901		John Arent Vanderpoel
80 Litchfield									rooms in parsonage
81 Lyme	40.00	town appropriation, fines, gifts		60.90	8.00	68.90			
82 Madison	2,742.00	town appropriation, invested funds, fines, fees	789.00	543.14	1,201.00	2,533.14	1900	35,000	Mary E Scranton
83 Madison		fees, fines, gifts	150.00	37.97	25.90	213.87	1875	2,500	Mr and Mrs H P Washburn
84 Manchester	1,590.39	town appropriation, fines, gifts	358.59	444.39	747.14	1,550.12			
85 Manchester									
86 Mansfield	153.22	town appropriation, subscriptions, fines, entertainments	45.00	118.81	38.31	202.12			
87 Meriden	6,422.47	town appropriation, invested funds, fines, other sources	2,320.00	1,204.38	1,757.10	5,281.48	1902	63,000	Mrs Augusta M Curtis
88 Middlebury	63.48	town appropriation, fines, gifts, other sources		85.56	7.20	92.76			rooms in town hall
89 Middlefield	453.17	invested funds, fines, gifts, entertainments, other sources	100.00	71.58	176.44	348.02	1893		Levi E Coe
90 Middletown	3,568.43	town appropriation, invested funds, fines	1,507.00	779.94	1,281.49	3,568.43	1874	35,000	Mrs Frances A Russell
91 Milford	2,040.00	town appropriation, fines	550.00	393.70	999.44	1,943.14	1894	24,500	Henry A Taylor
92 Montville		invested funds	472.00	289.00	32.35	793.35	1884	2,500	Albert C Raymond
93 Morris	50.00	town appropriation	20.00	19.69	10.41	50.10			
94 Naugatuck	4,052.67	invested funds, fines, other sources	1,680.00	612.52	806.08	3,098.60	1894		John Howard Whittemore
95 New Britain	17,630.03	town appropriation, invested funds, subscriptions, fines, gifts, other sources	5,339.42	5,141.53	6,309.08	16,890.03	1900	70,500	C B Erwin
96 New Canaan	4,188.95	town appropriation, membership fees, fines, gifts, other sources	330.15	89.49	1,601.74	2,021.38	1913	25,680	public subscriptions
97 New Fairfield	25.00	town appropriation	20.00		1.75	21.75			
98 New Hartford	350.00	town appropriation		69.73	387.52	457.25			

TABLE V—EXPENSES OF LIBRARIES, 1916—continued

TOWN	INCOME		EXPENSES				LIBRARY BUILDING		
	amount	sources	salaries	books and periodicals	other expenses	total	year erected	cost	name of donor
99 New Haven	45,460.25	city appropriation, fees, invested funds, fines, gifts, other sources	21,101.00	9,913.00	11,971.00	42,985.00	1912	400,000	Mrs Mary Elwell
100 New Haven	8,672.76	subscriptions, other sources	2,130.63	1,367.60	1,243.62	4,741.85	.....	.....	Library in business block
101 New Haven	2,000.00	city appropriation	800.00	300.00	.....	1,100.00	1910	16,000	public subscriptions
102 Newington	217.31	town appropriation, fines	83.50	56.35	56.57	217.31	.....	.....	.....
103 New London	.....	.....	.....	.....	.....	.....	1891	52,400	Henry P Haven
104 New Milford	2,026.89	town appropriation, invested funds, fines, other sources	832.00	552.11	496.90	1,883.01	1897	21426.89	Egbert Marsh and others
105 New Milford	4.50	membership fees	.....	9.53	.....	9.53	.....	.....	.....
106 Newtown	.....	.....	.....	.....	.....	.....	1900	.....	Rebecca D Bead
107 Newtown	106.71	.....	.....	.....	.....	88.73	1906	.....	private property use given to the library
108 Newtown	.....	.....	.....	.....	.....	.....	.....	.....	.....
109 Norfolk	.....	.....	.....	.....	.....	.....	1880	25,000	Isabella Eldridge
110 North Canaan	356.80	town appropriation, invested funds	175.00	135.61	100.47	411.08	1888	2,000	Edmond D Lawrence
111 North Haven	379.90	town appropriation, invested funds, fines	150.00	135.89	84.31	370.20	.....	.....	.....
112 No Stonington	.....	invested funds	400.00	223.58	55.80	679.38	.....	.....	.....
113 Norwalk	3,782.90	appropriation from taxing district	1,829.57	619.31	1,334.02	3,782.90	1902	24251.00	Andrew Carnegie \$20,000, citizens \$10,000 site and remainder of cost
114 Norwalk	4,325.28	appropriation from taxing district, invested funds, fines, gifts	2,035.10	1,281.41	936.23	4,252.74	1913	20,000	Andrew Carnegie
115 Norwalk	288.38	membership fees, invested funds, fines, gifts, entertainments, other sources	168.00	55.06	101.45	324.51	.....	.....	.....
116 Norwalk	.....	.....	.....	.....	.....	.....	.....	.....	.....
117 Norwich	8,217.46	town appropriation, subscriptions, invested funds, fines, other sources	3,361.57	2,162.28	3,244.65	8,768.50	1850	22,000	Joseph Otis and numerous citizens
118 Old Lyme	1,654.46	town appropriation, invested funds, fines, gifts, entertainments, other sources	600.00	233.53	711.77	1,545.30	1898	10,000	C H Ludington
119 Old Saybrook	458.86	town appropriation, invested funds, fines	212.85	20.22	139.80	362.87	1873	2,500	C Acton and others
120 Orange	1,091.50	town appropriation, fines	333.29	185.11	600.13	1,118.53	1909	10,000	Andrew Carnegie
121 Oxford	.....	.....	.....	.....	.....	.....	.....	.....	.....
122 Plainfield	414.46	town appropriation, membership fees, fines, gifts	78.60	25.10	165.12	268.82	1896	6,156	D L Aldrich and Edwin Milner

PUBLIC LIBRARIES.

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TABLE V—EXPENSES OF LIBRARIES, 1916—*continued*

TOWN	INCOME		EXPENSES				LIBRARY BUILDING		
	amount	sources	salaries	books and periodicals	other expenses	total	year erected	cost	name of donor
133 Plainville	238.72	town appropriation, fines, gifts	96.00	109.74	80.15	285.89	.....	.....	.....
134 Plymouth	241.18	subscriptions, invested funds	10.00	75.27	64.47	149.74	.....	.....	.....
135 Plymouth	442.27	town appropriation, fines	116.05	162.40	243.77	522.22	.....	.....	.....
136 Pomfret	†300.00	subscriptions, gifts	.....	†150.00	†80.50	†230.50	1911	4,200	Mrs George L Bradley
137 Pomfret	.....	.....	.....	.....	.....	.....	1886	1,000	A S Chase and others
138 Portland	443.73	town appropriation, invested funds, fines	265.00	174.05	8.53	447.58	1896	3,500	H B Buck
139 Preston	96.61	invested funds, fines, gifts	30.00	57.29	7.96	95.25	1898	1,500	Charles H Brown
130 Prospect	111.49	town appropriation, invested funds, fines	50.00	39.53	24.50	114.03	1905	4,000	Mrs B B Tuttle, Howard Tuttle and others
131 Putnam	1,370.66	town appropriation, fines, other sources	496.75	792.93	69.72	1,359.40	.....	.....	.....
132 Redding	1,310.38	fines, gifts, entertainments, other sources	150.00	81.21	600.21	831.42	1911	4,600	S L Clemens
133 Ridgefield	2,361.34	subscriptions, invested funds, fines, gifts	780.00	79.90	916.77	1,776.67	1902	46,000	James Morris
134 Rocky Hill	92.50	subscriptions, membership fees, other sources	.....	35.00	26.55	61.55	1899	1,400	\$250 by Mrs. W H Bradford, remainder by various contributors and library association
135 Roxbury	67.61	town appropriation, fines, gifts, other sources	.....	44.00	19.01	63.01	.....	.....	.....
136 Salem	71.83	fines, gifts, entertainments	10.00	96.28	15.48	121.74	.....	.....	.....
137 Salisbury	1,587.00	town appropriation, invested funds, gifts, other sources	550.00	200.00	812.95	1,562.95	1894	40,000	heirs of J and N C Scoville
138 Saybrook	116.00	town appropriation, fines	157.25	49.76	36.51	243.52	.....	.....	.....
139 Scotland	50.00	town appropriation, invested funds, fines	20.00	21.50	8.50	50.00	.....	.....	.....
140 Seymour	1,104.51	town appropriation, fines, gifts, other sources	481.00	237.40	222.81	941.21	1916	30,000	Henry Day and E P Day, maintenance fund by Charles Wooster
141 Sharon	.....	subscriptions, invested funds	300.00	177.50	93.00	570.50	1893	20,000	Mrs Maria H Hotchkiss
142 Sharon	25.00	invested funds	23.00	.....	.....	23.00	.....	.....	.....
143 Sherman	.....	.....	.....	.....	.....	.....	.....	.....	.....
144 Simsbury	.....	.....	.....	.....	.....	.....	1890	10,000	A R Eno
145 Somers	293.60	town appropriation, fines	133.33	5.20	155.07	293.60	1897	3,000	Mrs L Collins Whitney
146 Southbury	187.13	town appropriation, membership fees, fines, gifts, entertainments, other sources	.....	51.53	41.86	93.39	1907	1,100	.....
147 Southington	1,642.68	town appropriation, invested funds, other sources	527.77	300.78	651.56	1,480.11	1902	10,000	L V Walkley and town
148 South Windsor	125.00	town appropriation	40.00	69.53	17.67	127.20	.....	.....	.....

† approximate

TABLE V—EXPENSES OF LIBRARIES, 1916—continued

TOWN	INCOME		EXPENSES				LIBRARY BUILDING		
	amount	sources	salaries	books and periodicals	other expenses	total	year erected	cost	name of donor
149 South Windsor	184.92	town appropriation, fines	60.00	52.59	85.52	198.11	1905	3,000	Henry W Saddle
150 Stafford	.....	.....	.....	.....	.....	.....	1885	12,000	Miss Julia Johnson
151 Stamford	11,482.49	city appropriation, membership fees, invested funds, fines, gifts, other sources	6,041.40	2,228.95	3,217.14	11,482.49	1911	118,000	bequests from John Day P. Fugson, M. Richardson and others, city appropriation \$30,000
152 Stamford	.....	.....	.....	.....	.....	.....	.....	.....	.....
153 Stonington	862.05	invested funds, fines,	260.00	202.02	248.98	711.00	1900	26,000	E S Phelps and Samuel D Beal
154 Stratford	2,263.64	town appropriation, invested funds, fines, entertainments	963.24	608.10	643.31	2,214.65	1894	30,000	Birdsey E. Alaman
155 Suffield	1,775.46	town appropriation, invested funds, fines, gifts	665.02	308.07	675.52	1,648.61	1899	52,000	Sidney A. Knapp
156 Thomaston	530.00	town appropriation, fines, gifts	300.00	191.87	68.43	555.30	1902	8,629.48	Laura Andre library association subscriptions
157 Thompson	700.34	town appropriation, invested funds, fines, other sources	88.00	78.61	427.05	593.66	1902	8,000	.....
158 Thompson	54.50	subscriptions, fines, entertainments, other sources	12.00	20.00	.....	32.00	.....	.....	.....
159 Tolland	208.02	town appropriation, fines, gifts, other sources	100.00	.....	78.47	178.47	.....	.....	.....
160 Torrington	.....	.....	.....	.....	.....	.....	1911	63,000	Elisha Turner
161 Union	50.00	town appropriation	30.00	.....	.74	30.74	1913	.....	public subscription
162 Vernon	3,805.16	town appropriation, invested funds, fines, other sources	1,930.46	799.79	1,050.80	3,781.05	1904	90,000	Maxwell fund
163 Vernon	.....	.....	.....	.....	.....	.....	.....	.....	.....
164 Wallingford	3,531.61	town appropriation, membership fees, invested funds, fines, gifts, entertainments, other sources	1,150.47	707.80	1,874.56	3,732.83	1900	25,000	Samuel Surp
165 Warren	.....	.....	.....	.....	.....	.....	.....	.....	.....
166 Washington	900.65	invested funds, fines, gifts	251.00	93.63	556.64	901.27	1908	20,000	subscriptions
167 Waterbury	26,907.45	city tax, invested funds, fines, other sources	12,135.31	5,128.20	7,364.11	24,627.62	1894	65,000	Silas Brewster
168 Watertown	1,779.11	invested funds, fines	735.00	548.70	406.41	1,690.11	1883	16,000	Benjamin D. Forest
169 Watertown	681.23	town appropriation, fines, gifts	75.00	295.46	226.13	596.59	.....	.....	.....
170 Westbrook	407.71	town appropriation, invested funds, fines, gifts, entertainments, other sources	150.30	30.95	182.97	364.22	1904	8,000	subscriptions town appropriation of \$1 toward etc
171 West Hartford	640.61	town appropriation, invested funds, fines, gifts	343.00	145.25	140.35	628.60			

* includes janitors

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[illegible]

TABLE V—EXPENSES OF LIBRARIES, 1918

TOWN	INCOME		EXPENSES				LIBRARY BUILDING		
	amount	sources	salaries	books and periodicals	other expenses	total	year erected	cost	name of donors
1 Andover	102.00	town appropriation, invested funds, fines	18.75	27.80	21.03	67.58			
2 Ansonia	6,545.43	town appropriation, invested funds, fines	1,840.72	1,087.83	2,690.56	5,619.11	1891	67,000	Caroline Phelps Stokes
3 Ashford	120.00	invested funds	35.00	85.00		120.00	1889	400	Archibald B. Cock
4 Avon	107.00	town appropriation, fines	26.50	40.00	40.16	106.66			
5 Berlin	194.50	town appropriation, membership fees, invested funds, fines, gifts	37.00	62.83	101.40	201.23	1892	1,300	subscriptions
6 Berlin	61.14	town appropriation, fines, gifts	38.00	8.50	85.90	132.40	1901	1,000	Henry H. Peck
7 Berlin									
8 Bethel	729.00	town appropriation, invested funds, fines, gifts, other sources	162.50	109.90	243.85	516.35	1915	Seelye home-stead remodelled	Seelye family
9 Bethlehem	57.40	town appropriation, fines	25.00	27.39	3.36	55.75			
10 Bloomfield	853.95	town appropriation, invested funds, fines, gifts	200.00	399.34	100.00	699.34			
11 Bolton	50.00	town appropriation	52.00	21.33	2.90	76.23	1914	7,000	Bolton hall a library, built contributions citizens
12 Branford	15,539.74	invested funds, fines, entertainments, other sources	*5,791.74	†2,591.00	7,157.00	15,539.74	1896	400,000	Timothy B. Blackstone
13 Bridgeport		city tax, invested funds, fines, other sources	*14,667.40	13,987.90	10,989.31	39,644.61	1883	225,000	Mrs Catherine Pettingill
14 Bridge-water	111.00	town appropriation, fines	26.00	14.00	104.94	144.94			
15 Bristol	9,533.73	city appropriation, invested funds, fines, other sources	4,126.37	1,964.94	2,847.68	8,937.99	1907	47,000	citizens of Bristol
16 Brooklyn	318.75	town appropriation, invested funds, fines, gifts, other sources	50.00	151.57	94.76	296.33	1914	1,900	remodelled building; large number of subscribers
17 Burlington	50.35	town appropriation, fines	25.00	9.00	10.29	44.29			
18 Canaan	1,255.88	subscriptions, invested funds, fines	252.00	155.44	783.47	1,190.91	1891	10,000	Wealthy A. Catherine E. Hunt
19 Canton	347.41	town appropriation, membership fees, invested funds, fines	181.50	98.75	75.19	355.44			
20 Canton									
21 Chaplin	104.90	town appropriation, invested funds, fines, gifts	25.00	6.00	9.56	40.56	1911	6,000	William Ross
22 Cheshire	900.25	town appropriation, invested funds, fines	295.00	240.69	97.25	632.94	1911		remodelled building given by Dr. C. F. Williams
23 Chester	520.70	town appropriation, fines	150.00	98.81	255.78	504.59	1907		S. Mills Eiv
24 Clinton	635.27	town appropriation, membership fees, subscriptions, fines, gifts, entertainments, other sources	196.00	262.08	231.76	689.79			

* includes janitors

† includes binding

TABLE V—EXPENSES OF LIBRARIES, 1918—*continued*

TOWN	INCOME		EXPENSES				LIBRARY BUILDING		
	amount	sources	salaries	books and periodicals	other expenses	total	year erected	cost	name of donor
25 Colchester	762.05	town appropriation, invested funds, fines gifts, entertainments, other sources	177.36	197.60	524.75	899.71	1905	16,000	Edwin B Cragin, M D
26 Columbia	302.00	town appropriation, invested funds, fines	62.50	102.23	137.27	302.00	1903	2749.12	Saxton B Little and others
27 Cornwall							1908	25,000	John S Calhoun
28 Cornwall									
29 Coventry	861.13	town appropriation, membership fees, invested funds, fines	200.04	146.90	565.66	912.60	1913		H F Dimock
30 Coventry	40.12	invested funds, fines		35.00		35.00			
31 Coventry	43.13	invested funds	10.00	5.26	48.13	63.39			
32 Cromwell	182.29	town appropriation, invested funds, fines gifts	118.00	70.80	124.95	313.75			
33 Danbury	11,333.83	city appropriation, invested funds, fines rents, other sources	3,128.87	1,815.66	6,872.39	11,816.92	1879	30,000	E Morse White's family
34 Darien	567.20	town appropriation, membership fees, fines, other sources	187.50		364.16	551.66			
35 Derby	5,261.19	town appropriation, invested funds, fines gifts, other sources	2,375.57	970.49	1,727.80	5,073.86	1903	50,000	Mr and Mrs Holton Wood
36 Derby	1,351.43	town appropriation, membership fees, invested funds, fines gifts, entertainments, other sources		607.19	378.18	985.37	1907	3,400	William F Osborne and Andrew Carnegie
37 Durham	485.06	town appropriation, invested funds, fines entertainments	225.00	92.65	44.80	362.45	1902	5,000	citizens of Durham
38 Eastford	60.50	town appropriation, invested funds, fines	20.00	9.25	24.07	53.32			
39 East Haddam	640.00	town appropriation, fines, entertainments, other sources	300.00	72.85	267.15	640.00	1911	1,000	house formerly rented, bought by library association
40 East Hampton	498.73	town appropriation, fines, gifts, other sources	223.10	121.66	73.99	418.75	1898	400	subscriptions; mantle and fireplace by S Mills Bevin
41 East Hampton	104.25	town appropriation, fines other sources	34.30	77.26	23.74	135.30			
42 East Hartford	2,101.36	town appropriation, fines, gifts, other sources	933.39	198.76	576.21	1,708.36	1889	10,000	Albert C Raymond
43 East Haven	303.24	town appropriation, invested funds, fines other sources	50.00	29.33	160.52	239.85			
East Lyme	154.38	town appropriation, membership fees, fines, other sources		94.16	64.83	158.99			
East Windsor	151.04	town appropriation, fines		136.90	3.25	140.15			
East Windsor	523.27	town appropriation, invested funds, fines other sources	120.00	109.25	64.43	293.68			
Ellington	1,066.25	town appropriation, invested funds, fines other sources	280.25	43.40	572.03	895.68	1903	50,000	Francis Hall

TABLE V—EXPENSES OF LIBRARIES, 1918—*continued*

TOWN	INCOME		EXPENSES				LIBRARY BUILDING		
	amount	sources	salaries	books and periodicals	other expenses	total	year erected	cost	name of donor
48 Enfield	2,930.43	town appropriation, fines, other sources	862.00	520.01	911.97	2,293.98	1912	20,000	Andrew Carnegie
49 Essex	.....	.....	.....	.....	.....	.....	1898	2,500	Capt Joseph Tucker
50 Essex	.....	.....	.....	.....	.....	.....	1899	5,000	site by Harriet Comstock building Ladies' sewing circle and subscriptions
51 Fairfield	2,862.50	membership fees, invested funds, other sources	1,194.50	598.56	877.00	2,670.06	1903	29,000	public subscriptions
52 Fairfield	7,585.76	.....	.....	.....	.....	7,606.49	1887	75,000	Mr and Mrs E Monroe
53 Farmington	617.00	membership fees, invested funds, gifts	150.00	197.90	230.46	578.36	.....	.....	.....
54 Farmington	1,284.87	district appropriation, fines, gifts, other sources	100.00	125.10	939.73	1,164.83	1917	8,500	Andrew Carnegie
55 Glastonbury	708.45	town appropriation, fines	200.00	247.68	258.31	705.99	.....	.....	.....
56 Goshen	150.98	town appropriation, invested funds, fines	100.00	10.74	16.70	127.44	.....	.....	.....
57 Granby	202.38	invested funds, fines, gifts, entertainments	26.00	35.94	25.12	87.06	1918	.....	Bunce family
58 Granby	177.56	invested funds, other sources	70.00	53.90	26.25	150.15	1890	3,500	Frederick Combs
59 Greenwich	.....	invested funds, town appropriation, other sources	1,826.91	1,023.75	1,408.71	4,259.37	1895	25,000	Mrs E M Anderson
60 Greenwich	.....	.....	.....	.....	.....	.....	.....	.....	.....
61 Griswold	824.40	fines, gifts, other sources	300.00	76.60	425.98	802.58	1885	8,000	W A Slater
62 Groton	900.00	invested funds	275.00	135.21	389.23	799.44	1899	40,000	Frederick B. ...
63 Groton	.....	.....	.....	.....	.....	.....	1892	10,000	Eliza Spencer
64 Groton	.....	.....	.....	.....	.....	.....	.....	.....	.....
65 Guilford	69.00	fines, gifts	.....	.....	51.00	51.00	1891	1,500	E P Dickerson
66 Haddam	730.00	invested funds	212.50	29.56	352.61	594.67	1908	25,000	others Cyprian S Borden, jr
67 Hamden	.....	.....	.....	.....	.....	.....	.....	.....	.....
68 Hampton	.....	.....	.....	.....	.....	.....	.....	.....	.....
69 Hartford	34,147.57	city appropriation, subscriptions, invested funds, fines, other sources	18,286.07	9,894.80	5,144.94	33,125.61	re-modelled 1891 1892	200,000	occupies part Wadsworth Athenaeum
70 Hartford	5,172.98	invested funds	.....	.....	.....	5,432.38	.....	.....	.....
71 Harwinton	.....	invested funds	200.00	193.26	320.61	713.87	1912	.....	Theodore Hungerford
72 Hebron	105.66	town appropriation, invested funds, fines, gifts, entertainments	51.60	27.28	22.28	101.16	1896	1,000	various donations money and
73 Huntington	4,304.95	town appropriation, invested funds, fines, other sources	1,984.00	728.90	1,592.05	4,304.95	1895	30,000	David W Phelps by Horace Plumb

PUBLIC LIBRARIES.

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TABLE V—EXPENSES OF LIBRARIES, 1918—*continued*

TOWN	INCOME		EXPENSES				LIBRARY BUILDING		
	amount	sources	salaries	books and periodicals	other expenses	total	year erected	cost	name of donor
71 Kent	258.16	membership fees, invested funds, fines, gifts, entertainments, other sources	100.00	112.84	43.39	256.23			
73 Killingly			531.00	488.13	656.25	1,675.38	1903	15,000	Edwin Holmes Bugbee
76 Lebanon			50.00	21.91	13.75	85.66			what is known as "War Office", loaned by SAR for use of library
77 Ledyard							1891	4,000	Bill Brothers
78 Litchfield	2,454.13	town appropriation, invested funds, fines, gifts, other sources	896.40	697.29	1,006.39	2,600.08	1901		John Arent Vanderpoel
79 Litchfield									
80 Lyme	44.00	town appropriation, invested funds, fines, gifts		45.25	23.35	68.60			
1 Madison	3,798.67	town appropriation, membership fees, invested funds, fines, other sources	843.00	837.61	1,208.05	2,888.66	1900	35,000	Mary E Scranton
2 Madison		subscriptions, invested funds, gifts	150.00	27.75	69.89	219.89	1875	2,500	Mr and Mrs H P Washburn
3 Manchester	1,064.02	town appropriation, fines	436.18	356.32	264.19	1,056.69			
4 Manchester									
5 Mansfield	393.12	town appropriation, membership fees, fines, gifts, entertainments	72.00	73.85	58.41	204.26			
6 Meriden	6,540.66	town appropriation, invested funds, fines, other sources	1,965.00	1,457.31	2,432.29	5,864.60	1902	63,000	Mrs Augusta M Curtis
Middlebury	73.04	town appropriation, fines, gifts, entertainments		82.02		82.02			
Middlefield	445.90	invested funds, fines, gifts, entertainments, other sources	100.00	148.11	588.38	836.49	1893		Levi E Coe
Middle town	3,594.85	town appropriation, invested funds, fines	1,522.74	700.84	1,514.46	3,738.04	1874	35,000	Mrs Frances A Russell
Milford	1,710.00	town appropriation, fines	750.00	216.00	421.00	1,387.00	1894	24,500	Henry A Taylor
Montville	1,000.00	invested funds	500.00	350.00	152.00	1,002.00	1884	2,500	Albert C Raymond
Morris	66.00	town appropriation, entertainments	20.00	11.25	30.00	61.25			
Naugatuck	4,052.37	invested funds, fines, other sources	*1,830.00	625.56	1,632.12	4,087.68	1894		John Howard Whittemore
New Britain	18,506.99	town appropriation, subscriptions, invested funds, fines, other sources	6,383.23	5,529.34	5,715.38	17,627.95	1900	79,500	C B Erwin
New Canaan	5,230.53	town appropriation, membership fees, subscriptions, invested funds, fines, gifts, other sources	581.10	325.18	1,532.13	2,438.41	1913	25,680	public subscriptions
New Fairfield	25.86	town appropriation, fines	20.00			20.00			
New Hartford	362.58	town appropriation, subscriptions, fines			236.22	236.22			

includes janitor

TABLE V—EXPENSES OF LIBRARY, 1918—*continued*

TOWN	INCOME		EXPENSES				LIBRARY BUILDING		
	amount	sources	salaries	books and periodicals	other expenses	total	year erected	cost	name of donor
98 New Haven	\$77,379.33	city appropriation, subscriptions, invested funds, fines, gifts, other sources	25,171.00	11,119.00	\$44,395.00	80,635.00	1912	400,000	Mrs Mary Elv
99 New Haven	6,140.58	subscriptions, invested funds, gifts	2,601.66	1,270.25	1,615.18	5,487.09	1910	16,000	public subscri
100 New Haven									tions
101 Newington	155.37	town appropriation, fines	96.00	38.40	40.87	175.27			
102 New London							1891	52,400	Henry P Haw
103 New Milford	2,081.70	town appropriation, invested funds, fines	520.00	899.19	797.25	2,216.44	1897	21,426	Egbert Man
104 New Milford	10.36	subscriptions, invested funds							and others
105 Newtown				33.50			1900		Rebecca D Be
106 Newtown	10.00					19.40			
107 Norfolk							1880	25,000	Isabella Eldr
108 North Canaan	368.38	town appropriation, invested funds, fines, gifts, other sources	175.00	69.99	90.57	335.56	1888	2,000	Edmund D L
109 North Haven	373.25	town appropriation, invested funds, fines	150.00	136.04	73.77	359.81			rence
110 North Stonington		invested funds	400.00	148.50	105.14	653.70			
111 Norwalk	4,200.00	district appropriation	2,220.00	695.75	1,273.06	4,188.81	1902	24,251	Andrew Carn
									\$20,000, dist
112 Norwalk	4,094.40	district appropriation subscriptions, fines	2,422.67	674.37	496.70	3,593.74	1913	20,000	\$10,000, use
113 Norwalk	254.52	membership fees, fines, gifts, entertainments, other sources	164.00		84.93	248.93			remainder
114 Norwalk	294.93	fines, gifts, other sources		8.74	262.18	270.92			cost
115 Norwich	\$24,402.11	town appropriation, subscriptions, invested funds, fines, gifts, other sources	3,583.97	2,396.32	\$18,234.77	24,365.06	1850	22,000	Andrew Carn
116 Old Lyme	1,925.12	town appropriation, invested funds, fines, gifts, entertainments, other sources	700.00	297.76	640.69	1,638.45	1898	10,000	Joseph Otis
117 Old Saybrook	449.77	town appropriation, invested funds, fines, gifts, other sources	215.26	19.48	224.21	458.95	1873	2,500	numerous
118 Orange	1,579.60	town appropriation, fines, gifts, entertainments, other sources	367.16	151.30	1,144.52	1,662.98	1909	10,000	men
119 Oxford									C H Ledwith
120 Plainfield	381.23	town appropriation, membership fees, invested funds, fines, entertainments	96.60	31.26	124.67	252.53	1896	6,156	C Actor
121 Plainfield									others
122 Plainville	217.40	town appropriation, fines, other sources	104.00	113.70	20.09	237.79			Andrew Carn

‡ includes gift of \$9,000.00 ¶ includes \$16,044.47 invested † includes gift of \$20,000.00
 † includes expenditure of \$23,780.00 for branch building and site

PUBLIC LIBRARIES.

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TABLE V—EXPENSES OF LIBRARIES, 1918—continued

TOWN	INCOME		EXPENSES				LIBRARY BUILDING		
	amount	sources	salaries	books and periodicals	other expenses	total	year erected	cost	name of donor
3 Plymouth	510.29	town appropriation, fines, gifts	140.60	136.88	217.83	495.31			
4 Plymouth	261.00	invested funds, other sources		72.21	113.05	185.26			
15 Pomfret	236.50	subscriptions from non-residents		121.50	115.00	236.50	1911	4,200	Mrs George L Bradley
6 Pomfret							1886	1,000	A S Chase and others
7 Portland	426.92	town appropriation, invested funds, fines, other sources	265.00	132.34	61.10	458.44	1896	3,500	H B Buck
8 Preston	207.28	membership fees, invested funds, fines, other sources	47.50	63.67	24.40	135.57	1898	1,500	Charles H Brown
9 Prospect	151.50	town appropriation, invested funds, fines, other sources	50.00	47.15	55.30	152.45	1905	4,000	Mrs B B Tuttle, Howard Tuttle and others
1 Putnam	1,091.13	town appropriation, fines	518.11	263.73	164.31	946.15			
1 Redding	513.55	membership fees, fines, gifts, entertainments	150.00	90.24	155.62	395.26	1911	4,600	S L Clemens
1 Ridgefield	2,221.78	membership fees, invested funds, fines, gifts, other sources	780.00	190.15	1,038.60	2,008.75	1902	46,000	James Morris
Rocky Hill	111.35	subscriptions, invested funds, gifts, entertainments, other sources	11.50	48.00	60.00	119.50	1899	1,400	\$250 by Mrs W H Bradford; remainder by various contributors and library association
Roxbury	50.60	town appropriation, fines		33.75	16.17	49.92			
Salem	32.85	town appropriation, fines, gifts	10.00	31.87	35.16	77.02			
Salisbury	1,508.00	town appropriation, invested funds, fines, gifts	489.20	200.00	1,089.23	1,778.43	1894	40,000	heirs of J and N C Scoville
Saybrook	267.13	town appropriation, fines	109.25	185.55	21.12	315.92			
Scotland	57.55	town appropriation, invested funds, fines	20.00	11.80	25.75	57.55			
Seymour	3,169.63	town appropriation, invested funds, fines	983.00	289.45	1,630.01	2,852.46	1916	30,000	Henry Day and E P Day; maintenance fund by Charles Wooster
Sharon	1,563.12	subscriptions, invested funds, fines	300.00	293.57	661.27	1,254.84	1893	20,000	Mrs Maria H Hotchkiss
Sharon	25.00	invested funds	25.00			25.00			
Sherman									
Shelbury							1890	10,000	A R Eno
Shelbury	313.70	town appropriation, fines	150.00	5.90	167.80	323.70	1897	3,000	Mrs L Collins Whitney
Shelbury	85.45	town appropriation, fines, gifts, entertainments, other sources		43.30	31.86	75.16			
Shelbury	1,314.14	town appropriation, invested funds, fines	475.00	330.43	567.35	1,372.78	1902	10,000	L V Walkley and town
Shelbury	150.00	town appropriation	40.00	92.68	15.00	147.68			
Shelbury	142.77	town appropriation, fines, other sources	40.00	86.10	16.67	142.77	1905	3,000	Henry W Sadd

TABLE V—EXPENSES OF LIBRARIES, 1918—*continued*

TOWN	INCOME		EXPENSES				LIBRARY BUILDING		
	amount	sources	salaries	books and periodicals	other expenses	total	year erected	cost	name of donor
149 Stafford							1885	12,000	Miss Julia Johnson
150 Stamford	13,518.99	city appropriation, membership fees, invested funds, fines other sources	7,458.92	3,089.62	3,022.20	13,570.74	1911	118,000	bequests of John Day F. guson, M. Richardson and others, city appropriation \$50,000
151 Stamford									
152 Stonington							1900	26,000	E. S. Phelps and Samuel D. B. cock
153 Stratford	3,165.21	town appropriation, invested funds, fines entertainments, other sources	1,012.00	722.09	940.17	2,674.26	1894	30,000	Birdseye B. man
154 Suffield	1,769.00	town appropriation, invested funds, fines	649.40	365.28	784.63	1,799.31	1899	52,000	Sidney A. Ke
155 Thomaston	765.00	town appropriation, fines, gifts	300.00	370.75	44.32	715.07	1902	8629.48	Laura Andrus library association
156 Thompson	186.26	town appropriation, invested funds, fines	125.00	91.05	338.64	555.69	1902	8,000	subscriptions
157 Thompson	56.90	subscriptions, invested funds, fines, entertainments	13.25		18.00	31.25			
158 Tolland	199.38	town appropriation, fines, gifts, entertainments, other sources	100.00		49.84	149.84			
159 Torrington	†20,231.00	subscriptions, invested funds, fines, gifts, other sources	2,534.38	1,486.95	3,378.89	7,400.22	1911	63,000	Elisha Turner
160 Union	125.00	town appropriation	30.00		51.27	81.27	1913		public subscription
161 Vernon	4,393.25	town appropriation, invested funds, fines gifts	2,180.51	793.83	1,475.60	4,449.94	1904	90,000	Marwell fund
162 Wallingford	3,997.26	town appropriation, membership fees, invested funds, fines gifts, entertainments, other sources	1,452.20	700.57	1,825.21	3,977.98	1900	25,000	Samuel S. Gray
163 Warren				18.90		18.90			
164 Washington							1906	20,000	subscriptions
165 Waterbury	27,757.12	city appropriation, invested funds, fines	12,198.41	7,062.15	9,457.97	28,738.53	1894	65,000	Silas Bronson
166 Water-town	1,942.62	invested funds, fines, other sources	761.99	513.77	720.31	1,996.07	1883	16,000	Benjamin Forest
167 Water-town	206.43	town appropriation, fines, gifts	100.00	103.60	3.87	207.47			
168 Westbrook	472.62	town appropriation, invested funds, fines gifts, entertainments other sources	184.65	40.04	204.71	429.40	1904	8,000	subscriptions town appropriation of \$1 toward the Sarah W. Hooker D. A. R. Morris E. T.
169 West Hartford	2,356.83	town appropriation, entertainments, other sources	1,003.95	146.01	1,067.63	2,237.59	1917		
170 Westport	2,683.57	town appropriation, invested funds, fines gifts, other sources	860.75	447.46	805.41	2,113.62	1908		

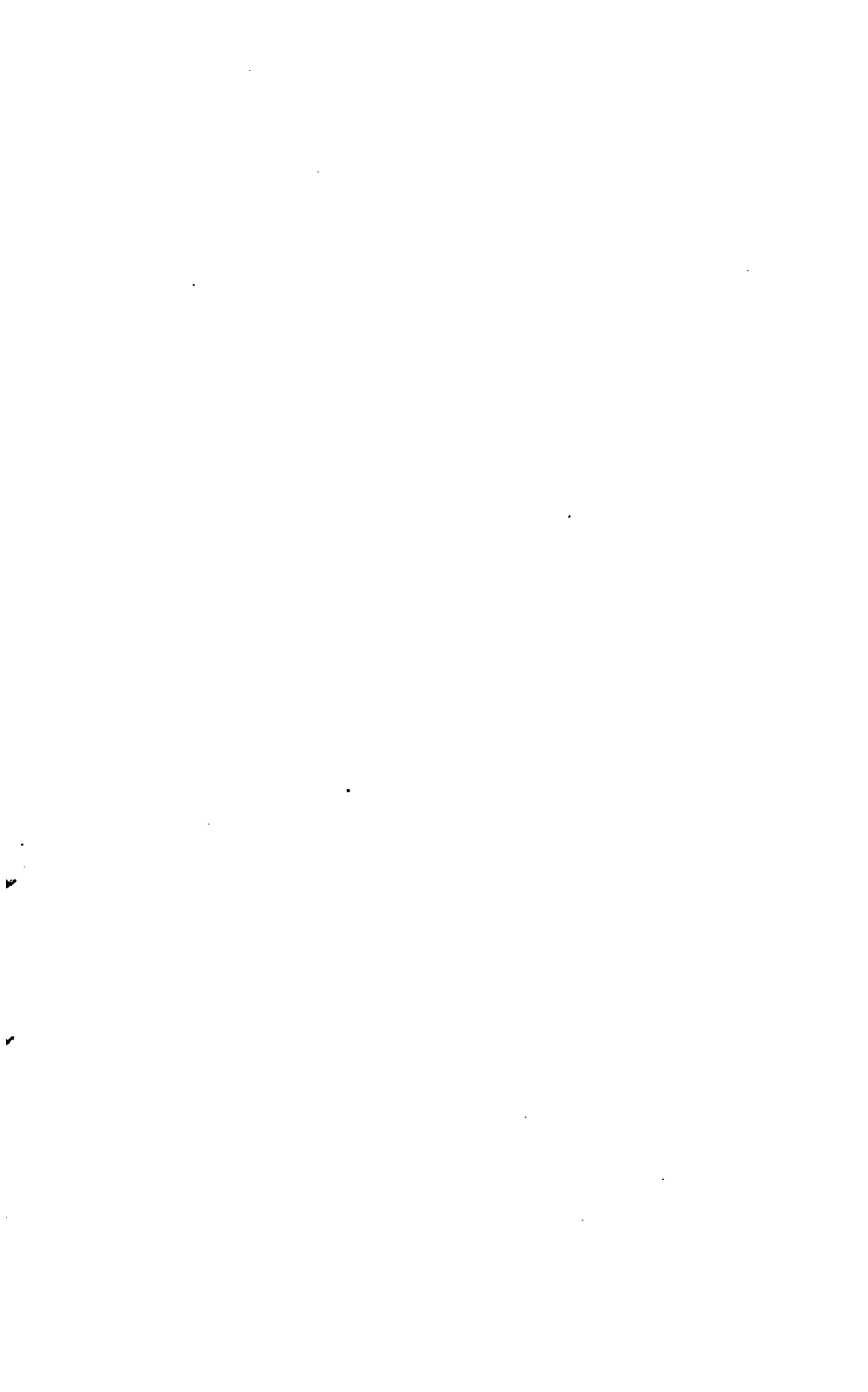
† includes gift of \$10,000.00

PUBLIC LIBRARIES.

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TABLE V—EXPENSES OF LIBRARIES, 1918—concluded

TOWN	INCOME		EXPENSES				LIBRARY BUILDING		
	amount	sources	salaries	books and periodicals	other expenses	total	year erected	cost	name of donor
171 Wethersfield	464.92	town appropriation, invested funds, fines	150.00	211.55	131.91	493.46	.....	.....	.....
172 Wilton	136.13	.....	30.00	.....	.....	124.50	1918	7,000	Wilton citizens
173 Winchester	2,794.99	town appropriation, invested funds, fines, other sources	1,038.10	513.09	1,241.42	2,792.61	1898	19,000	Mr and Mrs Jenison J Whiting
174 Winchester	.....	.....	.....	.....	.....	.....	.....	.....	.....
175 Windham	258.47	town appropriation, invested funds, fines, gifts, entertainments, other sources	15.00	35.57	121.91	172.48	1896	purchased for 1,000	bank building paid for by subscriptions
176 Windham	1,500.00	town appropriation	860.00	270.28	369.70	1,499.98	.....	.....	.....
177 Windham	.....	.....	.....	.....	.....	.....	1877	.....	Linen company
178 Windsor	445.36	town appropriation, fines, other sources	166.75	116.17	181.24	464.16	.....	.....	.....
179 Windsor Locks	665.31	town appropriation, invested funds, fines, gifts, entertainments, other sources	300.00	164.63	444.24	908.87	.....	.....	.....
180 Wolcott	.....	.....	.....	.....	.....	.....	.....	.....	.....
181 Woodbury	196.15	town appropriation, invested funds, fines, other sources	50.00	57.83	60.54	168.37	1851	2,500	Mr and Mrs E S Boyd
182 Woodstock	146.20	town appropriation, membership fees, subscriptions, invested funds, fines, gifts	85.00	1.00	14.66	100.66	.....	.....	.....
183 Woodstock	35.25	town appropriation, membership fees, fines, gifts	5.00	2.50	5.20	12.70	.....	.....	.....
184 Woodstock	.....	.....	.....	.....	.....	.....	.....	.....	.....



State of Connecticut
PUBLIC DOCUMENT No. 47

**State Geological and Natural
History Survey**

HERBERT E. GREGORY, SUPERINTENDENT

BULLETIN No. 32



HARTFORD
Printed for the State Geological and Natural History Survey
1920

State Geological and Natural History Survey

COMMISSIONERS

MARCUS H. HOLCOMB, Governor of Connecticut
ARTHUR TWining HADLEY, President of Yale University
WILLIAM ARNOLD SHANKLIN, President of Wesleyan University
REMBSEN BRINCKERHOFF OGILBY, President of Trinity College
CHARLES LEWIS BEACH, President of Connecticut Agricultural College
BENJAMIN TINKHAM MARSHALL, President of Connecticut College for Women

SUPERINTENDENT

HERBERT E. GREGORY

Publication Approved by the Board of Control

Press of
THE WILSON H. LEE COMPANY
NEW HAVEN, CONN.

**NINTH BIENNIAL REPORT OF THE
COMMISSIONERS**

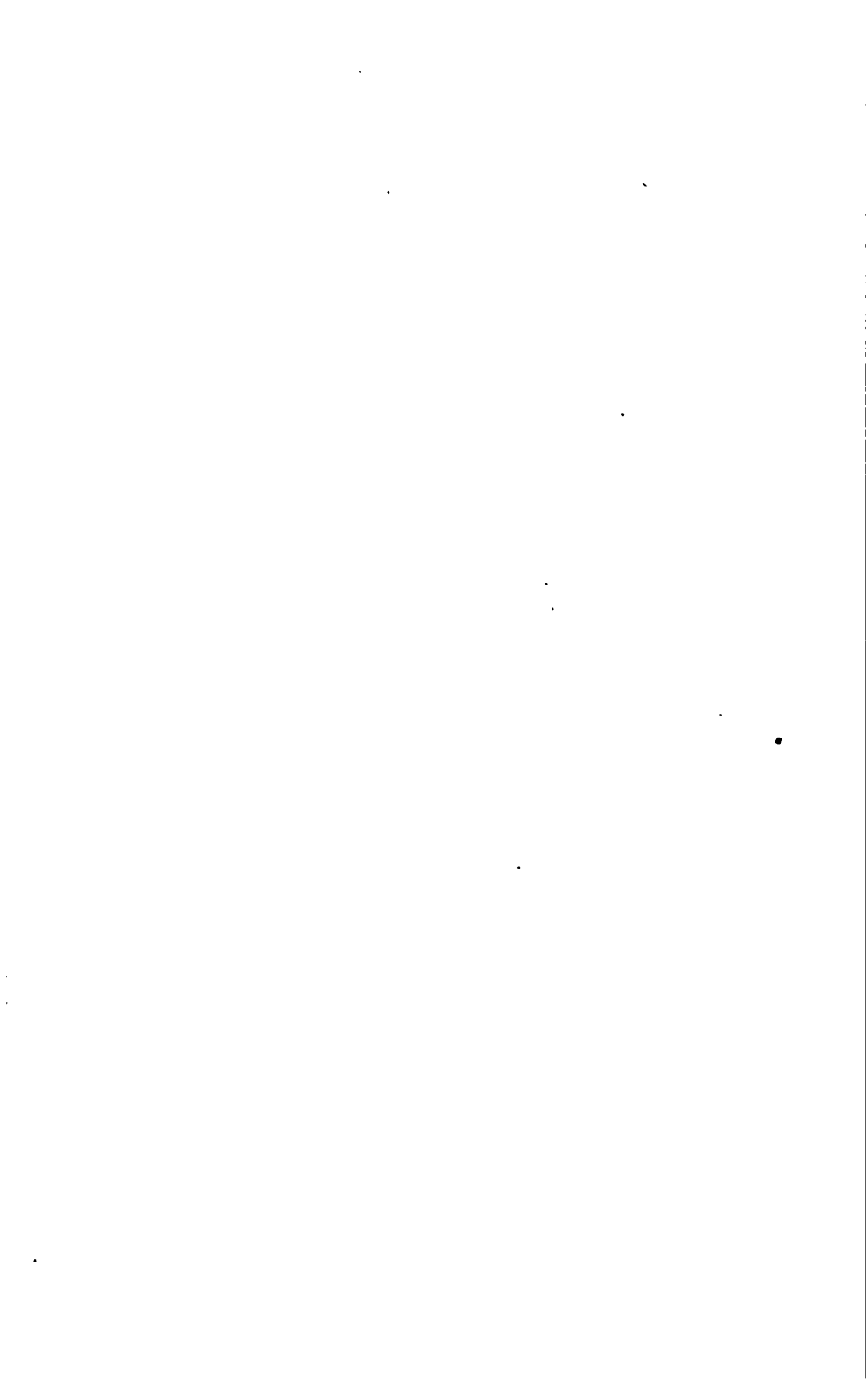
OF THE

**State Geological and Natural History
Survey of Connecticut**

1919-1920



HARTFORD
Published by the State
1920



LETTER OF TRANSMITTAL

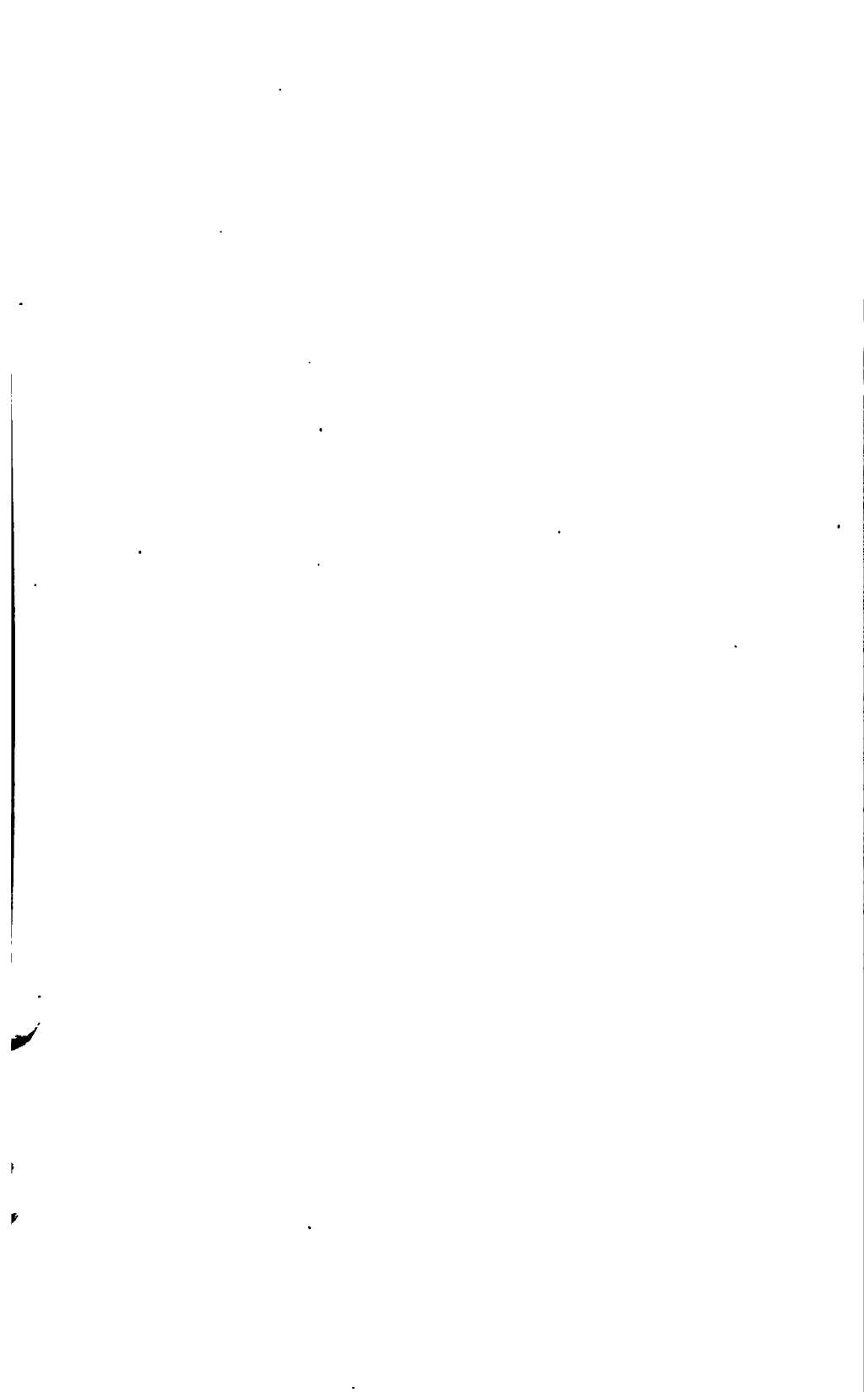
NEW HAVEN, CONN., December 30, 1920.

HIS EXCELLENCY, MARCUS H. HOLCOMB,
Governor of Connecticut,
Hartford, Connecticut.

Sir:—I have the honor to transmit to you herewith, in behalf of the Commissioners of the State Geological and Natural History Survey, the report of the Superintendent of the work, covering the two years ending December 31, 1920.

Very respectfully,

HERBERT E. GREGORY,
Acting Secretary of the Commission.



NINTH BIENNIAL REPORT OF THE GEOLOGICAL AND NATURAL HISTORY SURVEY OF CONNECTICUT

SCOPE AND PLAN OF THE STATE SURVEY.

The act of 1903 establishing the Survey proposed two subjects for investigation, viz, the geology of the State, and the natural history, or botany and zoology, of the State. It has been presumed to be the intent of the law that the appropriation should be divided with some approach to equality between geology and biology. The law further specifies three aims with reference to which the work should be prosecuted: first, the purely scientific aim of advancing our knowledge of the geology and natural history of the State; second, the economic aim of leading to the most effective conservation and utilization of the resources of the State; third, the educational aim of promoting the work of the schools of the State by the publication of the results of investigation in a form adapted for the use of teachers.

The plan of organization which was outlined in the first report has been retained. Only one salaried officer has been appointed by the Commissioners, viz, the Superintendent. Other scientific men have been engaged to investigate particular subjects and prepare reports or bulletins thereon.

The contracts made with these scientific men provide for an allotment for actual and necessary field expenses and for a small monthly salary during the time the investigator is at work in the field. For manuscript reports prepared without expense to the State, a small honorarium is paid to their authors. In making new contracts it is the policy of the Superintendent to include an agreement as to the date at which the completed report is to be submitted and to discontinue allotments for projects on which no work has been done for several years.

Each report is published as a separate bulletin, the bulletins being numbered consecutively, generally in the order in which they are received. Each bulletin bears the name of the author or the names of the authors, and each author is responsible for his own work. The bulletins are issued in paper covers, but a part of the edition is reserved for binding. Bulletins 1 to 5 have been bound as Volume I, Bulletins 6 to 12 as Volume II, Bulletins 13 to 15 as Volume III, Bulletins 16 to 21 as Volume IV, and Bulletin 22 as Volume V. The bound volumes are especially desirable for public libraries and similar institutions, in which complete sets of our publications are to be preserved. The pamphlet form, in

which each bulletin is complete in itself, is convenient for the large number of students, teachers, and others who have use for some particular bulletin. The publications of the Survey are distributed by the State Librarian. They are given liberally to colleges, public libraries, geological surveys, and other scientific institutions, and to scientific men of repute in the branches of science with which the respective bulletins are concerned. In many cases, books and papers of great value are received in exchange for the publications of the Survey. All books and papers thus received are deposited in the State Library. The publications of the Survey are also distributed liberally to citizens of our own State, particularly to teachers who can make use of them in their work. In the case of persons who are not known as scientific men, and who appear to have no special claim for the donation of the publications of the Survey, the bulletins are sold at prices sufficient to cover the cost of printing and transportation.

BULLETINS PUBLISHED.

The Survey has already published the following bulletins:

1. First Biennial Report of the Commissioners of the State Geological and Natural History Survey, 1903-1904, 18 pp., 1904.
2. A Preliminary Report on the Protozoa of the Fresh Waters of Connecticut, by H. W. Conn, 69 pp., 34 pls., 1905.
3. A Preliminary Report on the Hymeniales of Connecticut, by E. A. White, 81 pp., 40 pls., 1905.
4. The Clays and Clay Industries of Connecticut, by G. F. Loughlin, 121 pp., 13 pls., 1 fig., 1905.
5. The Ustilaginæ, or Smuts, of Connecticut, by G. P. Clinton, 45 pp., 7 pls., 1905.
6. Manual of the Geology of Connecticut, by W. N. Rice and H. E. Gregory, 273 pp., 31 pls., 22 figs., 1906.
7. Preliminary Geological Map of Connecticut, by H. E. Gregory and H. H. Robinson, 39 pp., 1 map, 1 fig., 1907.
8. Bibliography of Connecticut Geology, by H. E. Gregory, 123 pp., 1907.
9. Second Biennial Report of the Commissioners of the State Geological and Natural History Survey, 1905-1906, 23 pp., 1906.
10. A Preliminary Report on the Algæ of the Fresh Waters of Connecticut, by H. W. Conn and L. W. (Hazen) Webster, 78 pp., 44 pls., 1908.
11. The Bryophytes of Connecticut, by A. W. Evans and G. E. Nichols, 203 pp., 1908.
12. Third Biennial Report of the Commissioners of the State Geological and Natural History Survey, 1907-1908, 30 pp., 1908.
13. The Lithology of Connecticut, by Joseph Barrell and G. F. Loughlin, 207 pp., 6 tables, 1910.
14. Catalogue of the Flowering Plants and Ferns of Connecticut growing without cultivation, by a Committee of the Connecticut Botanical Society, 569 pp., 1910.
15. Second Report on the Hymeniales of Connecticut, by E. A. White, 70 pp., 28 pls., 1910.

16. Guide to the Insects of Connecticut, prepared under the direction of W. E. Britton. Part I. General Introduction, by W. E. Britton. Part II, The Euplexoptera and Orthoptera of Connecticut, by B. H. Walden, 169 pp., 11 pls., 66 figs., 1911.
17. Fourth Biennial Report of the Commissioners of the State Geological and Natural History Survey, 1909-1910, 31 pp., 1910.
18. Triassic Fishes of Connecticut, by C. R. Eastman, 77 pp., 11 pls., 8 figs., 1911.
19. Echinoderms of Connecticut, by W. R. Coe, 152 pp., 32 pls., 29 figs., 1912.
20. The Birds of Connecticut, by J. H. Sage and L. B. Bishop, assisted by W. P. Bliss, 320 pp., 1913.
21. Fifth Biennial Report of the Commissioners of the State Geological and Natural History Survey, 1911-1912, 27 pp., 1912.
22. Guide to the Insects of Connecticut, prepared under the direction of W. E. Britton. Part III, The Hymenoptera, or Wasp-like Insects of Connecticut, by Henry Lorenz Viereck, in collaboration with A. D. MacGillivray, C. T. Brues, W. M. Wheeler, and S. A. Rohwer, 824 pp., 10 pls., 15 figs., 1916.
23. Central Connecticut in the Geologic Past, by Joseph Barrell, 44 pp., 9 figs., 1915.
24. Triassic Life of the Connecticut Valley, by R. S. Lull, 285 pp., 12 pls., 3 maps, 126 figs., 1 section, 1915.
25. Sixth Biennial Report of the Commissioners of the State Geological and Natural History Survey, 1913-1914, 24 pp., 1915.
26. The Arthrostraca of Connecticut, by Beverly Waugh Kunkel, 261 pp., 84 figs., 1918.
27. Seventh Biennial Report of the Commissioners of the State Geological and Natural History Survey, 1915-1916, 17 pp., 1917.
28. Eighth Biennial Report of the Commissioners of the State Geological and Natural History Survey, 1917-1918, 21 pp., 1919.
29. The Quarternary Geology of the New Haven Region, Connecticut, by Freeman Ward, 80 pp., 9 pls., 17 figs., 1920.
30. Drainage Modifications and Glaciation in the Danbury Region, Connecticut, by Ruth Sawyer Harvey, 59 pp., 5 pls., 10 figs., 1920.
31. Check-List of the Insects of Connecticut, by Wilton Everett Britton, 397 pp., 1920.

Interest in these publications and their usefulness to the people of Connecticut is indicated to some degree by the number of requests for copies. The following summary is furnished by the State Librarian:

Bulletin	Date issued	Number of copies printed	Number of copies now on hand
1.	1904	3,000	17
2.	1905	3,500	Out of print
3.	1905	3,500	180
4.	1905	3,500	275
5.	1905	3,500	450
6.	1906	4,000	Out of print
7.	1907	3,500	50
8.	1907	3,500	500
9.	1906	3,000	575
10.	1908	3,500	580
11.	1908	3,000	520

Bulletin	Date issued	Number of copies printed	Number of copies now on hand
12.....	1908	3,000	19
13.....	1910	3,500	875
14.....	1910	4,000	1,550
15.....	1910	3,500	950
16.....	1911	3,500	375
17.....	1910	3,000	610
18.....	1911	3,500	960
19.....	1912	3,500	2,020
20.....	1913	4,500	1,250
21.....	1912	3,000	650
22.....	1916	3,500	1,150
23.....	1915	4,000	1,250
24.....	1915	4,000	1,134
25.....	1915	2,900	275
26.....	1918	3,000	1,002
27.....	1917	2,900	1,010
28.....	1919	2,500	200
29.....	1920	2,500	Not yet distributed
30.....	1920	2,500	" "
31.....	1920	3,000	" "

Vol. I	} 600 copies of each bulletin as listed above used for binding	} 262
" II		
" III		
" IV		
" V		

The editions of Bulletins 2 and 6 are exhausted for distribution purposes, as is also the Geological Map mounted for use on walls, accompanying Bulletin 7. The State Librarian remarks that on account of the constant demand for these three Bulletins, 2, 6 and 7, they might with profit be re-published.

Copies of all bulletins may still be obtained in bound volumes.

The publications made in cooperation with the United States Geological Survey are given on pages 12-14.

That the publications of the Survey are serving their purpose is indicated by laudatory reviews and by many letters of commendation. The following is an illustration:

"We consider that this [Bulletin 22] is one of the most valuable memoirs on the Hymenoptera that has been published on this continent, and systematic workers are finding it most useful."—Canadian Department of Agriculture.

Since the last Biennial Report, Bulletins 29 and 30 have been published. Bulletin 31 is now in press. Bulletin 29, the Quarternary Geology of the New Haven Region, Connecticut, by Freeman Ward, consists of a discussion of the preglacial, glacial, and post-glacial conditions of the New Haven region, together with a description of soils and of natural scenery.

Bulletin 30, Drainage Modifications and Glaciation in the Danbury Region, Connecticut, by Miss Ruth Sawyer Harvey, is a discussion of the streams in the Central Housatonic Basin.

A general description of the region centering at Danbury is given from a geological standpoint.

Bulletin 31, Check-List of the Insects of Connecticut, by Wilton Everett Britton, will be of value to institutions as well as to individuals in the identification of insects in the State. As Mr. Britton has been assisted in his work of records and identification of species by collectors and specialists in entomology in and near Connecticut, the list, though necessarily incomplete, is believed to be accurate. To quote from the preface of Bulletin 31:

"The purpose of this list is to stimulate an interest in the collection and study of insects in the State, as has been done in New Jersey, and to serve as a check-catalogue of the species in the collections of the institutions and amateur collectors. A work entitled "Guide to the Insects of Connecticut," containing keys to orders, families, genera, and species, and including much information about life-histories, habits, distribution, etc., is already in progress; two papers, the Euplexoptera and Orthoptera, by B. H. Walden, and the Hymenoptera, by Henry L. Viereck, having already been published as Bulletins 16 and 22 of this Survey. It will be many years at least before the Guide can be finished so as to include all orders of insects, and the usefulness of a check-list for service during this time seemed to warrant its preparation and publication."

UNPUBLISHED MANUSCRIPTS.

A paper on the Geology of the Stonington-Westerly region, Connecticut and Rhode Island, has been prepared by Miss Laura Hatch, and accepted for publication. Its aim is to give a complete geologic and physiographic description of a region which contains type physiographic and petrographic features.

A paper has been prepared on the Geology of the Guilford (Connecticut) Quadrangle by Wilbur G. Foye. This report represents a study of igneous and metamorphic rocks of this area as bearing on the geologic history of the State.

It is expected that the manuscripts of the following bulletins will be received during the coming year:

Hemiptera of Connecticut. Fifteen zoologists, under the direction of W. E. Britton, have contributed to the preparation of this bulletin which will have over 800 printed pages. Except for slight revision, this work is complete.

The Decapods of Connecticut, by A. E. Verrill. The introduction and the systematic portion have been completed, making over 200 printed pages, and 111 illustrations have been prepared. A bibliography is to accompany the report, which otherwise is practically complete.

The Vegetation of Connecticut, by George E. Nichols. The field work on which this bulletin is based has been completed and some progress made with the preparation of the manuscript. The scope of this work, authorized by the Commissioners in December, 1917, is indicated in Bulletin 28, page 18, 1919.

COOPERATION, WITH THE UNITED STATES GEOLOGICAL SURVEY.

During the years 1911 to 1917 the State Geological and Natural History Survey cooperated with the United States Geological Survey in a study of the water resources of Connecticut. During this time, 69 towns, which comprise 35 per cent of the area of the State and include 50 per cent of its population, were surveyed. The list of towns covered by this investigation is given in Bulletin 27, page 13, of the State Survey. Further work was discontinued on June 30, 1917, for the duration of the war. In 1919, cooperative work was again undertaken and a study made by Mr. John S. Brown of the underground water resources of the region bordering Long Island Sound.

By the terms of the contract, the United States Geological Survey assumed responsibility for the prosecution of the work, and Herbert E. Gregory, Geologist of the Federal Survey, was appointed to direct the investigations. The purpose of the series of studies is to determine the position, amount, and quality of the waters—particularly underground waters—of the State of Connecticut and to discuss their economic utilization. The value of such studies depends upon their usefulness, not only to communities using a common supply, but to individual landholders, and the preparation of reports has, therefore, involved detailed mapping and local descriptions. The position of ground water with reference to the land surface has been determined; areas of open field, forest, rock, and types of glacial soil have been outlined; water from springs, wells, and brooks has been analyzed; and studies of the most economical and sanitary supplies for farms and villages have been made. By description and discussion in the text, by tabulation of statistics and representation of data on maps and sections, the conclusions of the authors regarding amount, quality, and availability of water supply of each town are given.

By agreement, the results of these investigations of the water resources of Connecticut are to be published as water-supply papers of the United States Geological Survey, and the expense of publication is to be met by the Federal Treasury. Each water-supply paper will bear the title: "Prepared in Cooperation with the Connecticut Geological and Natural History Survey," and the contract reserves the right of the State of Connecticut to publish or republish all or parts of the reports.

The following publications have appeared:

Ground Water in the Hartford, Stamford, Salisbury, Willimantic, and Saybrook Areas, Connecticut, by H. E. Gregory and A. J. Ellis. Water-Supply Paper 374, 1916. 150 pp., 13 pls., 10 figs.

Ground Water in the Waterbury Area, Connecticut, by A. J. Ellis. Water-Supply Paper 397, 1916. 73 pp., 4 pls., 10 figs.

Water-Supply Paper 374 represents the first systematic attempt to investigate the ground water in the State. The area described covers 715 square miles and includes the towns of Hartford, West Hartford, Newington, Wethersfield, East Hartford, Manchester, Windsor, East Windsor, South Windsor, Bloomfield, Stamford, Greenwich, Salisbury, Canaan, North Canaan, Windham, Franklin, Saybrook, Essex, Westbrook, and Old Lyme. The aim of the paper is to show how much water is stored underground, how the supply fluctuates, what its quality is, how it can be procured, and how much can be secured from streams.

Water-Supply Paper 397 covers work on an area of about 171 square miles, and includes the towns of Ansonia, Seymour, Oxford, Beacon Falls, Naugatuck, Middlebury, Waterbury, Watertown, Thomaston. This region is rich in good water-power sites and well provided with water for municipal supplies, but the conflicting demands of water users have given rise to local problems of conservation. This report records facts and recommendations on which regulations for the use of water may be based.

These publications, and also Water-Supply Paper 232, by H. E. Gregory, *Underground Water Resources of Connecticut*, which deals with the State as a whole, may be obtained free of charge from the Director, United States Geological Survey, Washington, D. C.

The call for these studies of water resources of the State is somewhat greater than for many similar public documents. The first edition of Water-Supply Paper 232, issued in 1909, was exhausted and of the second printing, 228 copies were in stock on December 1, 1920. One hundred and forty copies of Water-Supply Paper 374, issued in 1916, and 316 copies of Water-Supply Paper 397, issued in 1916, were on hand December 1, 1920.

Papers in process of publication are the following:

Ground Water in the Meriden Area, Connecticut, by G. A. Waring, Water-Supply Paper 449. This report covers the towns of Meriden, Berlin, Middlefield, Middletown, Cromwell, and Rocky Hill. It includes chapters on the geography and geology of each town, and discusses the water supplies in detail under the headings: water in till, water in stratified drift, water in bed-rock, springs, wells, quality of water. This report has been approved for printing, but has been delayed on account of difficulty in obtaining paper for illustrations.

Ground Water in the Southington-Granby Area, Connecticut, by H. S. Palmer, Water-Supply Paper 466. This report treats of the geography, surface geology, and water resources of the following towns: Cheshire, Prospect, Southington, Wolcott, New Britain, Plainville, Bristol, Plymouth, Farmington, Avon, Burlington, Harwinton, Simsbury, Canton, New Hartford, Granby, Barkhamsted, and Hartland. This report is in page proof.

Ground Water of the Norwalk, Suffield, and Glastonbury Areas, Connecticut, by H. S. Palmer, Water-Supply Paper 470. The towns covered by this report are Suffield, East Granby, Windsor Locks, Enfield, Glastonbury, Marlborough, Norwalk, Darien, New Canaan, Westport, Weston, Wilton, and Ridgefield, which were surveyed in 1916. This report has received approval for printing and is now with the editors.

Waters of the Pomperaug Valley, Connecticut, by A. J. Ellis. This report is based on field work done in 1913 and a series of stream, well, precipitation, and evaporation measurements carried on continuously from May, 1913, to December, 1916, by Ernest W. Parkin, George A. Parkin, and Ralph V. Wooden, under the direction of A. J. Ellis and H. S. Palmer. The data has been largely compiled. Owing to the death of Mr. Ellis, the report will be prepared by some other geologist of the United States Geological Survey.

Ground Water in the New Haven Area, Connecticut, by J. S. Brown. This report has been completed by the author, and will be published as a Water-Supply Paper.

A study of Coastal Ground Water with Special Reference to Connecticut, by J. S. Brown. This report has been completed by the author and will be published as a Water-Supply Paper.

These reports are for general distribution and when published may be obtained free of charge by addressing: Director, United States Geological Survey, Washington, D. C.

The total expense to the State of Connecticut for the six years' (1911-1917) investigation of water resources under the cooperative agreement is \$6,000. The Federal Government has expended an equal amount in addition to the cost of supervision and administration and the large expense of publication. To meet the cost of the work done during 1919 and 1920, the United States Geological Survey allotted \$1,600 and the State Survey, \$1,940.

It is believed that this work, probably the most exhaustive study of a water-supply problem so far undertaken for a large area, has high value. The publications record basal studies whose results will become more useful as the population increases and problems of water rights and of sanitation become more complicated.

OTHER STATE SURVEY WORK.

Arrangements have been made with Professor William North Rice for the preparation of a bulletin on the geology and natural history of the Middletown region, a guide-book designed for scientists and teachers. It will probably be completed by the fall of 1921.

The Commissioners accepted in January, 1920, the offer of Professor Alexander Petrunkevitch to prepare a bulletin on the

spiders of Connecticut, a report for which many requests have been made. The completion of this report has been postponed by the author for a year because of unusual demands on his time.

A paper on the Odonata of Connecticut is being prepared by Philip Garman, Assistant Entomologist of the Connecticut Agricultural Experiment Station. This will probably be completed by October, 1921. Mr. Garman is also preparing a paper on Mites of Connecticut.

Arrangements have been made with Leonard M. Tarr, Meteorologist of the United States Weather Bureau, for the preparation of a manual on the climate of Connecticut. This report will take up the location of the State relative to the storm tracks and the character of the storms that pass over this section; the topography and its effect on the weather; the variety of forest and fruit trees and the effect of weather upon them; also the variety of crops that can be raised under favorable conditions; in fact, everything that would be affected by weather changes. It is believed that this report will be completed about April 1, 1921.

Peat Deposits of Connecticut. Under the direction of Professor William North Rice, formerly Superintendent of the Connecticut Survey, an investigation of the peat resources of the State was made from July to October, 1907, and continued during 1908, 1909, and 1914. This work was placed in charge of C. A. Davis, the foremost American authority on occurrence and utilization of peat. All the swamps, both fresh and salt water, of the State were studied and the amount and character of the deposits determined by specially devised sounding apparatus. The field work was supplemented by chemical analyses and microscopic studies and by tests of the value of the product as fuel and as fertilizer. It was pioneer work of high grade, and the methods of study developed have been successfully employed elsewhere. At the time of his death in April, 1916, the completed report had been in the hands of Professor Davis for nearly two years awaiting final revision. A thorough but fruitless search for this manuscript has been made. Fortunately, some of the field notebooks and maps remain, but there is little hope that material for publication can be obtained without practically taking up the work anew.

The proposal of Mr. C. C. Osbon of the American Peat Society to prepare a new report on the peat of Connecticut, a report which will give detailed information regarding the location, magnitude, and uses of the deposits of commercial importance in Hartford and Windham Counties, and including the results of studies already made by him in Fairfield county, has been accepted. This report will be completed by June 1, 1921. It is hoped that funds may be obtained to continue the study of peat deposits of Connecticut until all within the State have been investigated. Dr. E. H. Jenkins, Director of the Agricultural Experiment Station, has offered to assist in carrying on these investigations.

The Superintendent has served as the representative of the State and also of the Federal Government in cooperative work for Connecticut. He has assisted industrial concerns in their search for raw materials and has given advice to individuals and corporations outside of Connecticut in regard to suitable locations for manufacturing plants which plan to make large use of gravel, trap rock, feldspar, clay or peat. He has acted as adviser to various boards and commissions in matters relating to sites for buildings and water supply, and at the request of the Committee on Finance made a study of the water problems confronting the State Institutions at Mansfield and at Storrs. At the request of the Governor, he has served as a member of the committee on selecting a site for the proposed new State Prison.

PLANS FOR FUTURE WORK.

I. Geology.

The geology and physical geography of Connecticut possess features of unusual interest. The bulletins already published, the Manual of Geology, the Geological Map, Clays and Clay Industries, Triassic Life, and other reports, have been found useful. It is desirable to continue geologic investigation to include other and more detailed studies of areas and special problems. The State Librarian reports:

"Bulletin 6, Manual of the Geology of Connecticut, should certainly be reprinted, as it has been out of print some time and is a popular bulletin, perhaps the most popular of those issued."

Among the bulletins which should be prepared are the following:

Connecticut during the Ice Age. An explanatory description of the surface deposits, lakes, waterfalls, eskers, drumlins, and other topographic features for which the glaciers of Pleistocene time are responsible. Requests for the publication of such a report have come from teachers and other citizens.

Igneous and Metamorphic Rocks of Selected Areas. The structure and composition of the rocks of eastern and of western Connecticut are exceedingly complex, but the solution of the problems which they present is very desirable as a contribution to the geologic history of the United States. The studies already made by Professor W. G. Foye should be continued.

Mineralogy of Connecticut. A descriptive list of the minerals of the State, their occurrence, their geologic relations, and economic value.

Physical Geography. A number of papers of moderate size dealing with the geographic factors concerned with the location of cities, of routes of travel, and the development of industries would find a useful place. The reports should be made of type

localities and eventually combined to form a bulletin on the physical geography of the State. The preparation of papers similar to that now being written by Professor Rice (see p. 14) should be undertaken for other areas.

Feldspars of Connecticut. A bulletin describing the location and extent of feldspar deposits and their availability for commercial purposes.

Road-making Materials. A study of rocks of the State with reference to their suitability for use as crushed stone for road construction and concrete.

II. Botany.

The systematic botany of the flowering plants of southern New England has been comparatively well worked out and a list of flowering plants and ferns of Connecticut has been published by the Survey. Of the flowerless plants, the mosses, liverworts, fungi, fresh-water algæ and bacteria have been treated in Survey reports, which have received high commendation. Work on the ecology of the State, and on the peat deposits, is now in progress. Bulletins on the following subjects would be welcomed by students and investigators:

The Marine Algæ of the Connecticut Shore.
The Lichens of Connecticut.
The Trees of Connecticut.

III. Zoology.

Bulletins on the birds of Connecticut, on the fresh-water Protozoa, on the Echinoderms, on the Amphipods and Isopods, and two parts of a Guide to the Insects of Connecticut have been published. Professor Verrill reports that his paper on the Crustacea is nearing completion. It is desirable that in future years bulletins should appear on mammals, fishes, reptiles, Amphibia, and on selected species of marine fauna. Their publication is desirable from both educational and economic viewpoints.

APPROPRIATION DESIRED.

The work of the Connecticut Geological and Natural History Survey has amply justified its existence; it is highly commended by educational and scientific interests, and by leading business men both within and without the State. By eliminating overhead charges and taking advantage of financial contributions of the Federal Government, an unusual amount of creditable work has been accomplished at an expense far below that which has

been deemed necessary by similar organizations in other states. Although a large sum could be profitably expended on the scientific and educational problems which come within the scope of the Survey, the Commissioners are content to continue this policy of utilizing to the utmost a small but regular biennial appropriation.

They therefore request that the appropriation of \$6,000 for the two years just closing be renewed for the years 1921-22.

State of Connecticut

PUBLIC DOCUMENT NO. 60

REPORT
OF THE
STATE PARK COMMISSION
TO THE
GOVERNOR

For the Fiscal Term ended June 30, 1920

PRINTED IN ACCORDANCE WITH STATUTE

HARTFORD
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1921

**PUBLICATION
APPROVED BY
THE BOARD OF CONTROL**

**Press of
THE WILSON H. LEE CO.,
NEW HAVEN, CONN.**

HARTFORD, CONN., December 29, 1920.

*To His Excellency, MARCUS H. HOLCOMB,
Governor of the State of Connecticut.*

In accordance with Chapter 113, Revised Statutes of 1918, and on behalf of the Commissioners appointed under the same Statute, I have the honor to submit for your consideration the biennial report of the State Park Commission for the twenty-one months ended June 30, 1920, in accordance with Chapter 289, Public Acts of 1919.

LUCIUS F. ROBINSON,
Chairman of the Commission.

CONNECTICUT STATE PARK COMMISSIONERS

Appointed by the Governor.

JOHN E. CALHOUN, Cornwall,	Term ends Sept. 1, 1921
FAYETTE L. WRIGHT, Pomfret,	" " Sept. 1, 1921
HERMAN H. CHAPMAN, New Haven,	" " Sept. 1, 1923
EDWARD H. WILKINS, Chatham,	" " Sept. 1, 1923
LUCIUS F. ROBINSON, Hartford,	" " Sept. 1, 1925
GEORGE A. PARKER, Hartford,	" " Sept. 1, 1925

Ex-officio.

WALTER O. FILLEY, New Haven,	State Forester
CHARLES J. BENNETT, Hartford,	Highway Commissioner
ROBBINS B. STOECKEL, Hartford,	Comm. of Motor Vehicles

Officers, June 30, 1920.

LUCIUS F. ROBINSON, Hartford,	Chairman
GEORGE A. PARKER, Hartford,	Secretary and Treasurer

REPORT OF THE COMMISSIONERS.

This is the fourth biennial report of the State Park Commission. It is a record of progress rather than accomplishment.

The organization of the Commission necessitated by increasing responsibilities, and its activities during the two year period are set forth in the report of the Secretary-Treasurer. The financial statement on page 34 accounts for the appropriations made for State Parks by the General Assembly as well as funds received from other sources.

Since the last report we have acquired by purchase and gift ten new tracts and added to some of the earlier acquisitions. There are now twenty-five areas designated as State Parks, totaling 5,121 acres. Details regarding these parks will be found in the report of the Field Secretary.

We also include the report of our Development and Maintenance Committee prepared by its chairman, Mr. George A. Parker, who, because of his long experience in park work, is rendering invaluable service to the State as a member of this commission. The convictions and ideals which he expresses are heartily endorsed by the Commission as a whole.

Our estimates of appropriations needed to carry on our plans for an adequate system of State Parks include five hundred and thirty-five thousand dollars for purchase of land and two hundred and fifty thousand dollars for development and maintenance.

Large as these sums may seem to the citizens of Connecticut, we feel justified in asking for them, even at this time when the financial affairs of the State, as of other states, are in some confusion on account of the war and must be readjusted to meet the new conditions of peace. In these new conditions State Highways, State Forests and State Parks must have their place and there is no better time to demonstrate what that place is than during this readjustment.

During the war the success of army recreational activities in maintaining morale awakened the cities to their own recreational needs, with the result that city parks and open spaces are fast being turned into playgrounds. There is a serious need of real parks, which can no longer be filled by the cities. We heartily believe that only through the development of State Parks can this need be supplied.

Respectfully submitted,

LUCIUS F. ROBINSON,
Chairman.

REPORT OF THE SECRETARY AND TREASURER.

The Commission held thirty-two meetings during the twenty-one months covered by this report; nineteen in Hartford; three at Macedonia Brook, two at Hammonasset Beach, two at Wharton Brook, one each at West Peak, Mashamoquet Brook, Buttonball Brook, Nathaniel Lyon Memorial, Peter's Rock and Wooster Mountain.

The interest of the Commission has been largely concerned with:

First: Trying to increase its efficiency by the adoption of additional rules:

- (a) The Chairman is *ex-officio* a member of all committees.
- (b) The Chairman to approve all payments of every kind.
- (c) A standing committee to review all lands proposed and purchase those selected:

East of the Connecticut River, Commissioner Wright;
West of the Connecticut River, Commissioner Calhoun;

The Field Secretary a member of the Committee and acting with both.

(d) The care and management of plantings and plantations referred to Commissioner Filley.

(e) A committee for the development and maintenance of all parks, consisting of Commissioners Parker, Bennett and Filley.

(f) A general superintendent of all parks; Arthur V. Parker was appointed.

(g) Custodians for the larger parks:

Macedonia Brook.....C. W. Bishop
Wharton Brook.....P. J. Lawler
Hammonasset Beach.....J. P. Synnott

Second: Discussion to determine policy; Report on land visited and the purchase of that selected.

Third: A favorable decision on the establishment of mountain and valley trails across the State and within it, for pedestrians only. A narrow strip—across the mountain tops for the view, up the hillsides and through the valleys—to be obtained by purchase or easement, which will prevent the cutting of forest growths by private parties—with log huts for shelter every five or ten miles; a very practical thing to do.

Fourth: Towns are inclined to abandon unused roads. These might be used in the trail system and would be of use also in the general park system, but would require legislation to allow them to be so used.

The Treasurer's report ends with the term of the fiscal year on June 30, 1920. I would like, therefore, to add a short statement of what has occurred since that date.

Fifth: A Wayside Park was established at Wharton Brook, located between Wallingford and New Haven. The house on the premises was transformed, rather crudely, into a residence for the custodian, with rest rooms, toilets, a refectory and sheltering shed with an outlook for the public. The fifty acres of land has been cleared of underbrush and dead wood and the two beautiful brooks have been made accessible. A two-acre lot has been graded for a ball field. That it was appreciated by the public is shown by the record of visitors. We began keeping account of them on September 6th, 1919. There were but few campers over night, only forty-four. The total attendance was over thirty thousand. There were 10,147 who used the toilets during the day; 2,458, during the night. This feature alone is worth much to automobilists. While the rest rooms are not elaborate, yet the toilets are neat and clean, under constant care day and night, and the plumbing installed is of the best. The income from this service to December 1, 1920, was \$26,715.96; the expenditure, \$26,042.04; giving a net surplus of \$673.92.

Sixth: Hammonasset Beach—a pavilion three hundred and fifteen feet long was built here, facing the beach, with two wings for bath houses, containing toilets and showers. A small refectory was established in the pavilion and bathing suits were rented for moderate prices. Tables and seats were placed on the pavilion for those who chose to bring lunches, or to use them in any way. Every one was welcome, whether purchasing anything or not, and everything was free except what was for personal consumption. Free parking spaces were provided for those who wished to use them and a paid parking space under supervision of a caretaker was also provided. Camping sites were offered without charge for two nights and a day, but if parties wished to stay longer a small charge was made. All this was done roughly and in a crude way, not as well as we would have liked to do it, yet as well as we knew how in the short time we had to prepare it for use. That the people appreciated it is shown by the attendance. For thirty days, including Sundays and special days, account was kept of those who came, numbering over forty-eight thousand. For forty lesser days no count was kept. From what we have, however, it is a safe assumption that fully sixty thousand persons visited the Beach this summer. The cost of the season's service to October 4th was \$5,748.52; the receipts to that day were \$8,879.57, which shows a surplus of \$3,131.05. While the receipts have been small since October 1st, expenses necessary for maintaining it and improving

it in some minor matters have been carried, so that the surplus December 1st was only \$1,847.38, sufficient to last until it opens again; thus showing here, as well as at Wharton Brook, that service in a State park, if rightly controlled, is self-supporting and it is not the purpose of the Commission to make money through these projects. It is the money of the people of the State that paid for this work and they should have the benefit of what they have paid for, but should not have to pay for that which is used by private persons, and this is what the charge for service covers.

Seventh: While but little has been done at Macedonia Brook except general patrolling of the park areas, yet there has been some cleaning out of the underbrush and cutting of dead wood. The custodian has stopped fires, or prevented them, and to quite an extent prevented hunting within the park. Fishing in the brook is allowed. A small pavilion shelter was also built in this park.

Eighth: The parties who had purchased a part of the standing timber at the Devil's Hop Yard left behind quite a quantity of slash and slabs. For cleanliness sake and prevention of fires the slash was burnt, and the slabs were taken to Hammonasset Beach and used in the form of siding for the pavilion. A part of the grounds at the Hop Yard was cleaned of dead wood and underbrush, especially between the road and the brook, and poles were cut—largely dead chestnut—for posts at Hammonasset pavilion. As there were over one thousand posts in the pavilion, this illustrates how one State Park helps another and shows clearly that the different areas included in our State Park system should be treated as one unit, as one park, offering with their varying locations and character an opportunity of exchange between them which is a very practical solution of many of our problems.

Respectfully submitted,

GEORGE A. PARKER,
Secretary and Treasurer.

REPORT OF THE FIELD SECRETARY.

*To the Connecticut State Park Commission,
Gentlemen:*

In the three biennial reports previously submitted to you it has been necessary to dwell largely on your aims and hopes; to put into cold blooded words for the critical eye of the Connecticut Yankee the visions of a future park system that your special studies in the field have made clearer and clearer to you. It has been your unquestioned duty, during the greatest of wars, not only to see such visions, but to report periodically upon them, in the Land of Steady Habits, to the reputed inventors of the Wooden Nutmeg. And you have faithfully seen, reported, and have now begun to realize, the impossible.

Let us this time begin with the realities, and let the future follow on, as it usually does.

During this two year period you have gained four notable witnesses for the defence, which will continue the case for State Parks long after these early reports are filed away and forgotten.

Wharton Brook, with its wayside service station, first of its kind in New England; Kent Falls, unrivalled elsewhere in the State; the Devil's Hop Yard, sixty to a hundred years of forest growth saved by your prompt action at the critical moment; and Hammonasset Beach, last chance on the Connecticut shore for a large and satisfactory park at reasonable cost. In addition to these you have gained two new and valuable members, a General Superintendent, with the beginnings of a service organization, and have on two parks most successfully launched public service operations on a considerable scale.

Surely, if your own seven years of service had yielded no other returns than these, you would feel amply rewarded.

As my full time has been devoted to the general problem of further acquisitions, this report will cover only lands acquired and general suggestions, leaving the subjects of Use, Development, and Maintenance for the report of your Secretary and standing committee.

Growth of the State Park System.

A period of seven years is enough to furnish a reasonable perspective; let us first line up those years and take stock of their several real results. As a unit we most perforce take the acre, which in comparing parks is of little more use than it would be in comparing pictures—still, roughly, it will serve to measure growth.

The acreages given are in most cases those named in the deeds, though the areas of Sherwood Island and Macedonia Brook have been corrected by survey.

To show the growth of the separate park units a tabular form is necessary, and as a possible future convenience for cross reference an acquisition number is prefixed to each park.

Connecticut State Parks

Acquisitions 1914-1920

No.	PARK	ACRES							TOTAL
		1914	1915	1916	1917	1918	1919	1920	
1	Sherwood Island..	9	5	1	15				30
2	Hurd Park.....	427		28					455
3	Mt. Tom.....	19		1	199				219
4	Mt. Bushnell.....			70	14				84
5	Selden Neck.....				122				122
6	Haystack.....				1				1
7	Ivy Mountain.....				50				50
8	Mohawk Mountain.....				5				5
9	Great Hill.....				10				10
10	West Peak.....				68	100	13		181
11	Mashamoquet Brook.....				12				12
12	Saptree Run.....				22				22
13	Macedonia Brook.....				1522	96	53		1701
14	Bolton Notch.....				70				70
15	Dart Island.....				1				1
16	Wharton Brook.....					50			50
17	Buttonball Brook.....					90	45		135
18	Kent Falls.....					200	19		219
19	Hammonasset Beach.....					499	53		552
20	Black Pond.....					100			100
21	Devil's Hop Yard.....					765	95		860
22	Lake Waramaug.....						75		75
23	Woodster Mountain.....						100		100
24	Nathaniel Lyon Memorial.....						60		60
25	Humaston Brook.....						7		7
ACREAGE ADDED									
EACH YEAR		9	451	100	416	1725	1900	520	5121

Gifts.

Of the acreage above shown a notable proportion has been acquired by gift, either of land, or of funds for purchase. The list, by years, with names of donors, follows:

<i>Year</i>	<i>Park</i>	<i>Donors</i>	<i>Acres.</i>
1913	MT. TOM	Mrs. G. A. Senff	180
1918	MASHAMOQUET BROOK	Miss Sarah Fay	12
	SAP TREE RUN	Miss Sarah Fay and Mr. J. Bowditch	4
	MACEDONIA BROOK	White Memorial Foundation	1,552
	DART ISLAND	Mr. Russell Dart	1
1919	KENT FALLS	White Memorial Foundation	200
1920	MACEDONIA BROOK	From gift funds of the White Memorial Foundation	53
	HUMASTON BROOK	From gift funds of the White Memorial Foundation and Mr. Henry B. Peck	3
Total			2,005

The gift of Mt. Tom antedated somewhat the establishment of your Commission, and until 1917 that park was under the care of the State Forester. The purchase of adjoining land in 1915 determined its acquisition order, following your previous purchases at Sherwood Island and Hurd Park. The Senff gift was transferred to your care under Chap. 377, Special Acts of 1917.

Gifts of funds for general purposes, including purchase of land, appear in the report of your Treasurer.

From the above lists it appears that for every three acres purchased by the State for park purposes, nearly two acres have been given. This has been in no case the result of any special solicitation on your part, but it has been most gratifying to find here and there such generous and cordial support of your work, and some of your finest acquisitions have come in this way.

Lands Acquired.

This list is intended to supplement previous reports, including all parks and noting recent changes, but omitting all non-essential detail of those previously described.

1 SHERWOOD ISLAND—30 acres.

WESTPORT

This tract comprises a number of small holdings purchased with such funds as were available between 1914 and 1917, and consists entirely of salt meadow and sand-bar with a rather rough and stony beach. A considerable area of undeveloped upland adjoins it, but is held at too high a valuation to permit further extensions until much greater sums are available for park purposes. The need for a large shore park here is undoubtedly great, but it has so far been impossible to secure the necessary land. To undertake any makeshift development of this small holding is to invite immediate overcrowding, discomfort and dissatisfaction. The numbers to be accommodated are much greater than those at Hammonasset, and the sole means of access is by auto, for which practically no parking space exists. I believe the Commission is justified in deferring any considerable development until a reasonable amount of upland is secured.

2 HURD PARK—455 acres.

EAST HAMPTON

No purchases of land have been made since 1916 and very little development attempted. The extension of the State Highway leading to Haddam Neck passes the entrance and has made this park available to auto parties so that it would undoubtedly repay some immediate attention. It is primarily a river park and the question of suitable docking facilities is a serious one, and yet to be solved.

3 MT. TOM—219 acres. LITCHFIELD, MORRIS AND WASHINGTON

No additions have recently been made, but the Waterbury Council, Boy Scouts of America, whose summer camp, "Sepunkum," was established there in 1916, have this season undertaken extensive improvements under leasehold, and have occupied the camp site for the usual ten weeks period.

Under Chap. 377, Special Acts of 1917, the erection of a permanent stone observation tower has recently commenced, replacing the original wooden tower in fulfilment of the condition of the deed of gift.

4 MT. BUSHNELL—84 acres.

WASHINGTON

No change has occurred since your last report except that an observer from the tower may now look down upon another State Park, Lake Waramaug, hereinafter described.

5 SELDEN NECK—122 acres.

LYME

Your negotiations for further extensions here in 1919 were unsuccessful, and in 1920 your funds have been insufficient to renew the attempt.

6 HAYSTACK—1 acre.

NORFOLK

7 IVY MOUNTAIN—50 acres.

GOSHEN

8 MOHAWK MOUNTAIN—5 acres.

CORNWALL

9 GREAT HILL—10 acres. EAST HAMPTON AND PORTLAND

These four lookout points remain undeveloped, and no changes in area have occurred since the last report. They all represent key positions acquired with small purchase funds with a view to future usefulness.

10 WEST PEAK—181 acres.

MERIDEN AND SOUTHTON

Since your last report two parcels have been added to West Peak by purchase, including 100 acres along the ridge to the north and 13 acres at the south foot, fronting on the State Highway between Meriden and Waterbury and adjoining Hubbard Park. It may be found feasible to locate a service station on this parcel, though there is a lack of sufficient parking space for auto parties wishing to go up the Indian Trail to the summit. This can no doubt be remedied.

11 MASHAMOQUET BROOK—12 acres.

POMFRET

Specimen stand of old hemlock; no changes since your last report.

12 SAP TREE RUN—22 acres.

POMFRET

Natural stand of old hardwoods, with suitable site for service station. No changes since last report.

13 MACEDONIA BROOK—1,701 acres.

KENT

Your survey of this tract revealed a considerable discrepancy between the deed acreage of "2,000 more or less" and the actual area of 1,552 acres, which was not at all surprising considering the holdings included no less than 64 original parcels, and such former surveys as could be found were made previous to 1840. The field work of your survey was virtually completed in 1919, but the base maps on scale of one inch to the hundred feet have not yet been reduced to a scale suitable for reproduction here.

Since the last report 149 acres have been added by purchase (partly from gift funds) of which the most notable features are the rocky gorge with water power rights, known as the old furnace site, which contains some excellent old hemlock; and the red brick

house dating back a hundred years or more, now occupied by the custodian of the park.

14 **BOLTON NOTCH—70 acres.**

BOLTON

Undeveloped wayside park, no change since last report.

15 **DART ISLAND—1 acre.**

MIDDLETOWN

Wooded sandbar in the Connecticut River off Maromas Station. No changes since the last report.

16 **WHARTON BROOK—50 acres. NO. HAVEN AND WALLINGFORD**

Partially developed wayside park with service station. No acquisitions since last report. (See Secretary's report of development and operation.)

17 **BUTTONBALL BROOK—135 acres.**

CHAPLIN

A bit of natural park modelling in modified glacial drift forms; now growing hardwood sprouts after a clean cutting and slash fire about 1914 or '15. Includes a suitable site for service station on the State Highway from Chaplin to Brooklyn.

18 **KENT FALLS—219 acres.**

KENT

This includes the gift of the White Memorial Foundation and your recent purchase of 19 acres in adjustment of a disputed boundary. Another twenty acre parcel should be purchased before the most satisfactory boundary will be reached, having in mind future development requirements. Also a topographic map of this park is most essential in planning for its future, and should be undertaken as soon as possible.

Your efforts to acquire this masterpiece of water sculpture began in 1915, and the State is most fortunate in securing it with timber undamaged by cutting, which it narrowly escaped. It is peculiarly subject to injury by increased public use, from the steepness of its natural slopes, and the utmost care will be needed to make these safe and permanent without in any way disfiguring them.

Kent Falls is a series of falls on a mountain stream known as Falls Brook, in the northeastern part of Kent. The stream rises in Warren, draining an area of six or seven square miles, and flows west through the Berkshire Schist to the big fall, where it meets the Stockbridge Limestone in a plunge of about 70 feet, of which the upper half is sheer and the lower half cascade. From here it descends in a most charming series of lesser falls and cascades through a dense stand of hemlock to the main valley road and enters the Housatonic River some 200 feet below the brink of the big fall and only a quarter of a mile away. The Stockbridge Limestone is a pure white marble with some intermixed streaks and knots of schist, and is most wonderfully carved into fanciful curved forms, with many potholes of all sizes. The grove about

the big fall has long been a favorite spot for picnic parties from the region.

19 HAMMONASSETT BEACH—552 acres.

MADISON

The Act of 1913 specifically authorizes the purchase of "open places," and this park most strictly conforms to that description. It is about as open a place as I have found in Connecticut. It consists about equally of low-lying upland and salt meadow, with a mile of sandy bathing beach equal to any in the State. Up to the Spring of 1919 it was well served by the Shore Lane Trolley, about a mile of which, now abandoned, lies within the park limits. The discontinuance of this service has been a serious handicap for the first season here, but the beach remains, and some means of transportation will certainly be found.

This was one of the five shore sites selected in 1914, and was unquestionably best adapted for your first demonstration of a shore park. It is not by any means to be regarded as complete, either in area or development, and by itself it can never serve entirely the demands of the public for shore privileges, but it can readily be made to show the need for such places, if that has not even now been done.

Description of your development and operation here during the past season will be found in the report of the Secretary.

20 BLACK POND—100 acres.

MIDDLEFIELD

This tract lies on both sides of the State Highway between Meriden and Middletown, in the notch between Higby and Besek Mountains, with frontage on the north and east sides of Black Pond. It is admirably adapted for a wayside park and also for a station on the projected Trap Rock Trail which may sometime become a feature of your park system.

Black Pond is an excellent example of a lake in the trap rock setting, which gives it a strong individuality. Most of the Connecticut lakes in this setting are used for sources of water supply and are not entirely available for your purposes. This lake has been raised somewhat and is used as storage for a water power below the outlet at East Meriden.

The tract was acquired by purchase in a single parcel in 1919, and admirably illustrates the advantage of seizing a favorable opportunity on a site previously selected as desirable. It should be rapidly extended and developed for use.

21 DEVIL'S HOP YARD—860 acres.

EAST HADDAM

This great prize deserves more than brief mention at this time. It lies on the west branch of Eight Mile River, a considerable stream rising in Shaw Lake and flowing southerly through the eastern part of East Haddam. At Chapman Falls, southeast of

Millington, it plunges sixty feet over a series of steps in the Scotland Schist, into the deep gorge of the Hop Yard. The region is remote from fuel and lumber markets, and a remarkably fine stand of hemlocks and hardwoods has for years attracted parties from New London and the neighboring towns. The Commission visited Chapman Falls in 1914, and it was pictured in your first report, though the surrounding forestation was not fully appreciated at that time. The owner of the falls then placed a high valuation on the power rights, and that fact and the difficulty of access from the west prevented any immediate action.

Late in August, 1919, you received notice from Miss A. G. Willard of Colchester, that a steam sawmill was at work in the Hop Yard and asking that your help be given at least to saving the trees in the highway. After a careful investigation you were convinced that it was a case in which your interference would be justified, and that funds could then be spared from other projects to save this site from further injury. The mill owner had secured timber rights on a single tract only, but had planned for a two-year campaign to clean up everything in sight. You were able to reach agreement with him on September 15th, and all cutting on the tract was ended that night. About ten acres had been cut over, unfortunately in a long strip bordering the highway, but not extending to the brook, and the damage done was slight by comparison with that prevented.

Meanwhile, you had obtained reasonable prices from adjoining owners, including the best timber and the falls and power right, and before the end of the year you had secured a large and compact holding of more than 700 acres. Some additions were delayed into the current year, and one or two desirable parcels yet remain outside the park limits, but your chief object was accomplished.

All those who enjoy this resort hereafter should gratefully remember the energetic initiative of Miss Willard and the important part it played in saving the beauty of the Hop Yard, but to her, success was its own reward.

The name of the Devil's Hop Yard has been so long in local use that no certain explanation of its origin can now be offered. Mr. Francis Parker, of Hartford, and a native of East Haddam, has made careful search, and has found a tradition that a man named Dibble at one time lived on the stream below, and grew hops—that is, had a hop yard, but he says the name of Dibble does not appear in the Land Records of East Haddam, though there were Dibbles in Colchester. Whatever the origin, it would seem inadvisable now to revise or change so ancient and picturesque a name, through to the present generation it is not descriptive. Dibble or Devil, it was long ago, and we all know in New England that the Devil had a great eye for wild and rugged scenery, and that it has long been in his charge and keeping.

22 LAKE WARAMAUG—75 acres.

KENT

This is another example of unforeseen opportunity suddenly appearing and as promptly accepted. You have from the first classed Lake Waramaug among those upon which a considerable public frontage was desired, but the conditions on that lake, caused by the steepness of its shores and the highway which closely skirts them, have made it difficult to secure such frontage. Early in 1920 the sudden offering of the largest and most desirable holding on the lake found you without sufficient funds to meet the situation and the property was consequently subdivided. After this subdivision you were enabled to secure a desirable minor portion, located on the west shore of the lake in the town of Kent, and including about one-half mile of well wooded frontage. Furthermore, this frontage is comparatively level, with one to two hundred feet depth from highway to lake, making it well adapted to public use. The acreage in the rear is well forested, some especially fine old hardwoods being a prominent feature, with hundred foot cliffs of Berkshire Schist and unusually rugged talus slopes. The talus is coarse, blocks of ten and fifteen foot sides lying almost free, and covers several acres from which it has apparently been impracticable to remove any timber whatever. White and red oak, black, yellow and paper birch are of huge size, and will form a distinct feature of the park, though not visible from the highway. Some clearing up and development will be necessary here in the near future.

Lake Waramaug takes its name from the Indian chief of the Wyantinoeks, whose principal seat was at the falls of the Housatonic in New Milford, now known as the "Lover's Leap." His name was varyingly spelled as Weromaug, Raumaug, etc., and in signing a grant of the Litchfield lands as witness in 1716 he used the mark "R," from which it seems probable that our principal accent should properly be on the second syllable of the name as now spelled, though custom puts it on the first. The region around this lake was a favorite one with the tribe, and was for some time reserved from sale to the English as "Weroamaug's hunting grounds."

Weroamaug was the last chief of his tribe and died about 1735, after a nominal conversion to Christianity. He was accounted a good Injun, even alive, and time has removed the last doubt. Also, he had an eye for natural beauty and hung to it well, for which he may yet live to be honored.

23 WOOSTER MOUNTAIN—100 acres.

DANBURY

The name Wooster Mountain seems to have been given to the station occupied by the Coast and Geodetic Survey prior to 1888, in the primary triangulation system of New England. The name does not appear on the standard scale topographic sheets of the Geological Survey, but is used on the reduced scale chosen for the

wall map of Connecticut. It does not appear to be in local use, but has been adopted by the Commission for its historical association, as marking the mountain mass over which General Wooster pursued the British troops in their hasty retreat from Danbury, and overlooking the scene of his last battle.

The tract secured by this purchase lies on an outlying spur known as Moses Mountain, and does not include the station used by the Coast Survey, which should be added later. Both these summits are slightly above the 1,000 foot level, being the highest points in Fairfield County, and command interesting and extensive views. The tract is well wooded and is surrounded by a large wooded area which is manifestly the best for a mountain park in that portion of the State.

While the advantages of this site have long been recognized, the purchase of this tract was determined merely by a favorable opportunity, the owner, Mr. Hiram Kellogg, becoming interested in your work and desiring to see a beginning made on this project. He offers a large adjoining area for cost to him, plus carrying charges, which offer I consider a most advantageous one to the State and most honorable to Mr. Kellogg.

General David Wooster (1711-1777) was a native of Stratford, a graduate of Yale, 1738, and served the Colony with distinction in the French Canadian Wars. At the beginning of the Revolution he was a retired Colonel in the British Army, on half pay, but promptly tendered his services to the Colony and immediately after the Battle of Lexington was commissioned Major General of Connecticut troops, the first to be so named.

During the summer (1775) he was commissioned a Brigadier General of the United Colonies and served in the defence of New York and the expedition to Canada. On his return in 1776 he was appointed Major General of Connecticut Militia, and it was in the service of home defence that he fell on April 27, 1777, near Ridgefield, in the pursuit of Tryon's raiders. He was carried to Danbury, where he died on May 2, 1777, and was buried.

He was also organizer and first Worshipful Master of the first Lodge of Free Masons in Connecticut (Hiram Lodge, No. 1, New Haven, 1750) and in 1854 a dignified and worthy memorial was erected over his tomb by co-operation of the Free Masons, the State of Connecticut, and the citizens of Danbury. The site is about half a mile northerly from the railroad station, facing the main entrance to the old Cemetery.

24 NATHANIEL LYON MEMORIAL—60 acres

EASTFORD

On the State Highway from Willimantic to Putnam, about half a mile south of Phoenixville, a road branches off to the east, crossing the Natchaug River and bearing southerly. Following this road about two miles, keeping to the right at each fork, one

comes to the birthplace of Nathaniel Lyon, now long abandoned as a habitation and marked only by the huge stone chimney which still stands some hundred yards west of the highway, half overgrown with bushes. Heavy stone walls mark the site of the barn and farmyard, which stood a little to the north. A few acres of rugged mowing still surround the ruins, with the usual cyclopean hedgerows marking the old fence lines. A short distance to the south is the Beaver Dam Brook and the beginnings of the Eastford State Forest, now 984 acres and steadily growing. Most of the Lyon tract is well wooded and the old chimney needs but little attention to constitute the best possible permanent mark.

General Lyon's burial place is on the westerly side of the State Highway, just where the road to his birthplace leaves it, and has received some attention from the State. A Special Commission was established by the Assembly of 1907, and the sum of \$500 was appropriated for general improvement of the Lyon lot, already marked by a twelve foot marble shaft. This Commission enlarged and graded the lot and reported to the Assembly of 1909, inserting cuts of the Cemetery before and after the improvement, and also a cut of the old Lyon homestead in a state of partial collapse, and it was suggested that a monument to General Lyon should be erected on the Capitol Grounds at Hartford, and that some attention might well be given to his birthplace.

The Life of General Nathaniel Lyon, by Ashbel Woodward, M.D., was published by Case, Lockwood & Co., in Hartford in 1862. In addition to a fine steel engraved portrait this contains most interesting views of the birthplace and Cemetery as they were at that time.

Nathaniel Lyon was born on July 14, 1818, in that section of the town of Ashford which in 1847 became the town of Eastford, and graduated at West Point, June 30, 1841.

Immediately appointed Second Lieutenant in the Second Regiment of Infantry, he joined the regiment in November and took part in the closing scenes of the Seminole War in Florida. In the Mexican War he was present at Vera Cruz, Cerro Gordo, Contreras, Cherubusco, Molino Del Rey, Chapultepec, and City of Mexico. From 1850 to 1860 he was in active service on the western frontier and when the Civil War broke out was in command of the arsenal at St. Louis with the rank of Captain.

In May, 1861, he was appointed Brigadier General of the First Missouri Volunteers, and by his prompt and vigorous action in the few critical weeks of his last campaign the State of Missouri was saved to the Union. Almost without support, he so broke the rising tide of secession in that State that it never fully recovered, though at the cost of his own life. He was killed at the battle of Wilson's Creek, August 10, 1861. His body was brought home for burial and was placed in the cemetery at Phoenixville on September 5, 1861, with the highest military honors by State and Nation.

His sword, belt and chapeau were presented to the State by his relatives and were by special act deposited with the Connecticut Historical Society in the Wadsworth Atheneum at Hartford, where they are now displayed.

25 HUMASTON BROOK—7 acres.

LITCHFIELD

To the east of the Northfield Cemetery is a rocky gorge cut deep in the Waterbury Schist and massive pegmatite by a small unnamed stream which now furnishes power for the Northfield Knife Co. A series of waterfalls, amounting to a hundred feet, and some fine old hemlocks, make a suggestive combination, but the hemlocks were marked for boards. With some local assistance, you have recently arranged that they shall still wave, for which I am sure they are duly grateful. There may be disputatious argument about gratitude in the human heart, but never in the heart of a tree.

The first purchase was made from gift funds of the White Memorial Foundation and Mr. Henry B. Peck, of Northfield.

The name Humaston is taken from the family name of the first settlers on the tract, about 1760, and the original spelling is followed, the usual form now being Humiston, though the name is not common in the vicinity.

Reflections.

Five thousand acres of land; to most people that seems quite a lot. One begins to hear questions: "Still buying land? Haven't you got enough yet?" "Do you want the whole State?" etc., etc.

Let me try to explain what relation that five thousand acres bears to a system of State Parks for Connecticut. And I must go back seventy-one years, to 1849, when Horace Bushnell was talking about a park for the city of Hartford, which then had a population of about 13,000.

That was a good bit before I was born, but I know perfectly well what people said to him. "Park? Park? Whaddya mean Park? What's it for?" And the good Doctor explained—for five long years he explained to those thirteen thousand people; and in 1854 they voted a bond issue of \$100,000 for the park now known by his name; the first public park in the history of the world to be bought for that purpose with the people's money by their own vote.

Before that a park was a place for a great man and his friends, from which he could shut other people out. If that seems incredible and you can't swallow it, look it up; I felt that way about it myself when I first discovered it.

Now since 1854 we have all learned what a public park is, in fact we have learned it very thoroughly. And most naturally our ideas are all based on Bushnell Park for that was the first exemplar of the idea. Why, for twenty-two years it was known merely as "the Park," and had no other name. "Park" was enough for that time, and entirely definite.

And for city parks, Bushnell Park is a very good example, and always nice to think about. But it is so easy to get one set of our ideas mixed up with another set, and so hard to attach a new meaning to an old word. We all know there are many possible kinds of parks, but we are familiar only with the Bushnell Park kind, where for every dollar's worth of land, five, ten, or fifty dollars has been used in digging out, filling in, walling up and bridging over, cutting down one set of trees and setting out cuttings of others, covering up rocks here and sticking up rocks there, with a lavish profusion of flower beds and fountains, winding tar walks, mud pies and statuary. On all of which the lawn mower never sets.

I am not criticising the city type of park; I am only saying there are other possible kinds, of which the State Park happens to be one.

The city park as we know it had its origin sixty-six years ago, when our numbers, our ways of living, and particularly our methods of getting about were quite otherwise than what they have since become. We have specialized all that time in the city park because when we do once absorb a new idea we never can have too much of it until the next one comes along.

I say again that we have in Connecticut tens of thousands of acres of natural park scenery surpassing anything that money and skill can hope to construct; and we pay no heed whatever to it, or have not till recently.

Of course it is not in its natural condition; we won't even let it alone long enough to see what that would be like. But now that we can get about the State almost as easily as its people could get about Hartford in 1854, why in the name of all the hardboiled should we go on neglecting our manifest opportunities? Must we forever continue to make expensive mud-pies in the back yard when God's outdoors is almost open to us? (I say almost, because somebody else holds title to most of it.)

Your conception of the State Park has never been that of a city park on a glorified scale, and I do not need to emphasize this further; but I am trying to explain how much land we shall need for a system of State Parks in Connecticut.

Connecticut has in round numbers, exclusive of its public highways, 3,000,000 acres of land, of which fully one-half is natural forest land, that is, too steep or too rocky and rough for tillage under the conditions of our modern civilization.

Our forefathers, in their violent distaste for a landed aristocracy of blood, carefully ruled out any prolonged entail of real estate, leaving each generation free to hack down its own forests and move on to fresh fields. So long as there were fresh fields to move on to, this worked well enough for each generation, but left things in constantly worse shape for the succeeding generation.

Each generation has built its own homes, always in a new place, sometimes in two or three new places, and we have quite successfully avoided the great peril of any landed aristocracy of blood. Instead of that we have a truly American boast, "Three generations from shirtsleeves to shirtsleeves," which is a great improvement if you wish to think so.

But this improvement, if so it be, has worked havoc and destruction to our forests, till even their memory has been blotted out. Because a twenty year old man might cut down a seventy year old tree in fifteen minutes, and has always found profit for himself in the operation. (I say might, not may, since the opportunities are now so greatly curtailed—he first has to find the tree.)

Instead of that we now have the seventy year old man cutting down the twenty year old tree, because he can't wait any longer; though the profit, even to himself, has greatly diminished.

Now the park problem in Connecticut is very largely a matter of trees; and no man, for any amount of money, can "grow" a tree; he can merely control some of the conditions and leave the "growing" to God, or if we object to that term, let us say to the tree itself, which in some mysterious way seems to know how to do it. All the tree asks is standing room.

More and more I would reduce the plea for State Parks to its lowest terms: standing room for trees.

But this sounds like Forestry, and so it is; intelligent public Forestry, which is able to realize that men die, but man survives. And it is the only way, without permitting a strict entail to the eldest son, that we can hope to reconstitute our forgotten forests.

Connecticut has had a State Forest policy for twenty years, designed to encourage the private owner to grow timber, and under this policy the private owner has steadily cut off his half grown stand and sold the mutilated remnant to the State for four dollars or eight dollars per acre, as prescribed by law. That is, he has cut it off anyway, and sold the land to the State if and when he could. for the appropriations under this so-called forest policy have been so ludicrously small that the State Forests (at four dollars or eight dollars per acre) do not yet much exceed 4,000 acres. Frequently, moreover, before selling out to the State the private owner allows the slash to burn, on the celebrated mother-in-law doctrine of "Take no chances—bury *and* cremate."

But the Act of 1913, establishing a State Park Commission, says nothing about the growing of forests. No, it mentions public

recreation, and the preservation of natural scenic beauty and historic association. It does not define either of these categories.

What do we understand by "public recreation"? On this term alone your work hinges, because the wording of the act sufficiently indicates this to be the essential thing, and that the preservation of natural beauty and historic association are somewhat incidental, as evident means to the one end.

Are we not beginning dimly to perceive that our highly complex and intensive civilization must have its periods of contrast and relaxation? That the bow must occasionally be unstrung, or its force is lost?

Where do we get that popular cry, "Back to the woods"? Why do we issue hunting licenses by tens of thousands to "sportsmen" who frequently tramp the woods all day without getting a legitimate shot at a moving thing? Must we forever be condemned to carry a gun as an excuse for the pleasure of walking in the woods? Of course, just to walk in the woods for pleasure would be idleness pure and simple—conspicuous and unashamed idleness, and not to be seriously thought of or condoned in New England. It is respectable to be idle only when Nature finally rebels and the doctor, for a consideration, sends us to the sanitarium—a healthy place for the unhealthy, if we go to the root of this lovely word.

I will not attempt here to define public recreation. I leave that to you, as did the General Assembly of 1913, but I firmly believe that it has to do in some way with forests, and that if the public has enough forests of its own it will look after its own recreation, just as the tree will in general grow all by itself if it has standing room.

Now about acreage for a system of State Parks. We have seen that there are available a million and a half acres of potential forest lands in Connecticut, and so far as I can observe, not ten per cent. of that area is yielding anything like a reasonable return to its present owners. Every acre of it, if really forested, would possess natural scenic beauty in some degree, and almost every acre of it has some historic association of the two hundred and fifty years more or less of our occupancy. Certainly the places deserving of a modest marker are numbered by hundreds. We have no ancestral castles by which to keep alive our traditions, and dusty archives are poor substitutes for the places where history was made. We are almost going daffy over the notion of "Americanization," whatever that is, and Connecticut is pre-eminently the cradle of those ideals which have made "America" what it is. If Connecticut does not care for its own shrines, if we who know the story do not help to make it plain, wherewith shall we be "Americanized"?

Do we want more writers like Mark Twain, Harriet Beecher Stowe, and Charles Dudley Warner? And would it not be truly

recreational for those who need high courage to follow in their footsteps, to spend a few hours in the very houses where their best work was done?

But that is not a matter of acreage. I do not think you have yet attained the point where you can say Connecticut should have so many thousand acres in public parks and forests, nor do I think you are likely soon to reach that point, but I can show that our results to date are pitifully small and meagre even for present conditions.

Say we have 9,000 acres in State Parks and Forests; that is less than a third of one per cent. of our land area. New York, even now, has nearly seven per cent., and is steadily purchasing more land at an accelerated rate. That would be for Connecticut about 200,000 acres instead of 9,000. Either New York is very foolish or else we are not quite through buying land. Massachusetts has in one State Park, Mt. Greylock, as much land as we have in all our State Parks and Forests combined. Still Massachusetts is far behind New York, and is busily revising her forest policy in an effort to catch up. Is Massachusetts foolish too?

There is no possible folly in planning even now for five to ten per cent. of our area in parks and forests; that is, 150,000 to 300,000 acres, and you have already on file the results of my preliminary studies on that scale.

If it were actually proposed, or even for a moment fancied, to model this system in the remotest degree on the good old plan of Bushnell Park, that would indeed be folly, and would call for just the kind of impatient opposition you have met in the last seven years.

Dr. Bushnell convinced his select jury of 13,000 in the brief period of five years. Can you hope to reach 1,300,000 in any such length of time? Certainly you should be patient. But not too patient. It is no time to wait for applause.

And it must not be supposed that you would fence off even five or ten per cent. of Connecticut and suspend all cutting of timber in the name of recreation. There are certain spots here and there where virtually no cutting should ever be permitted, but they are relatively few and small. Most of the public lands of the State, either park or forest, will eventually reach the point where the annual growth should be removed by annual thinning, a method the private owner dislikes because, as one shining example explained it to me, "You would have to stop and look up every time before you started to cut a tree."

If in due process of time the private owner shall learn how to handle a forest, he may safely be left to do so, but if not, neither New York nor Massachusetts nor Connecticut will ever stop at ten per cent. of its area.

With the probable cost of acquiring such an area I am not at this time concerned.

What is the cost of permitting so large a proportion of our forest lands to be growing gray birch and choke cherry and scrub oak?

What is the cost of going by thousands to the Adirondacks and the White Mountains to see once in a while a bit of real timber?

What is the cost of putting off doing anything about it until the cost of doing anything is again doubled?

In my previous reports I have dealt with particular features of a park system; the salt water front, the rivers and streams, lake shores and mountains, without much discussion of any ultimate goal in numbers or area.

For this time I will omit such details as far as possible and rest upon this considered statement of the scale you should work upon. If I have been slow to put it in words you will not the sooner be driven to retreat from the position.

Acquisitions Proposed.

The acquisition by the State of park and forest lands on the scale herein proposed is a work of considerable magnitude by reason of the extreme subdivision of land in Connecticut, and also because in many cases not only the boundaries but even the ownership of such lands is in some doubt.

All ordinary methods of procedure would completely fail in so large an undertaking were it not for the unlimited amount of time which the State has in reserve. In a field so broad it is usually possible to find here and there an owner who really wants to sell. That is the time to buy, whether the tract is immediately needed or not. To be sure, it is not always the case that time is no object; for instance, at Hammonasset Beach the many parcels directly involved had to be consolidated within a single year, for immediate use; and in the Hop Yard, having saved one fine piece of timber, it was even more desirable to secure those around it before they should be damaged by cutting. Also with the first purchases in both those instances it was plainly a case of now or never. That is, the selection of both those sites for immediate purchase was practically forced by circumstances over which you had no control. Now a forced purchase is seldom an advantageous one, and it is much wiser, if possible, to predetermine what will sometime be wanted in the system and buy when it is for sale. At the same time, purchases must not be so scattering or so fragmentary as to have no present value.

Now it is evident, if these premises are granted, that it is practically impossible to lay down a fixed program of acquisitions two or three years in advance. It can only be said broadly, that your system should at all times be kept as well balanced as possible, and that perhaps your next great effort should be not on the salt water front, but should be rather among the fresh waters of the

State where you have as yet no holding comparable to Hammonasset. Most of our cities are distinctly in the low lands, and while a shore park may give them change of scene it can not give them much change of air. There are certain sites in the State about whose fitness for park purposes there can be no question, and where fortunately the owners of major holdings are now willing to sell. In fact, unless advantage can be taken of this situation now, such holdings are likely to be greatly broken up and privately developed in the near future. To name such sites here would most probably defeat your purpose.

At certain sites where the State already has holdings, this difficulty does not exist. Among these are desirable extensions at Hammonasset Beach, the Hop Yard, Selden Neck, and Wooster Mountain, where a rare opportunity is presented for a large extension at a favorable price.

I would strongly recommend increased attention to the trap rock ridges through the center of the State, on which you already have footholds at West Peak and Black Pond.

Some further purchases are immediately necessary if more wayside service stations are to be developed in this period, as they undoubtedly should be.

And I believe that a considerable portion of your estimate for the coming two-year period should be left free at this time, even in your own minds. Because no one can possibly foresee the favorable opportunities or the sudden emergencies that may arise in that period, and because it is only by accepting such opportunities or meeting such emergencies that you can secure the largest returns for the funds in your charge.

To take proper advantage of the great opportunities now before you, and to leave a reasonable margin for those that will surely arise, I have estimated as required for the purchase of land for the two years ending June 30, 1923, the sum of \$535,000.

And I would here again suggest that such sums for land purchase should more properly be provided by bond issue as needed, leaving the requirements of development and maintenance to be met by current revenue.

Respectfully submitted,

ALBERT M. TURNER,
Field Secretary.

Northfield, Conn.,
November 22. 1920.

REPORT OF THE DEVELOPMENT AND MAINTENANCE COMMITTEE.

Two years ago the Commissioners approved the establishment of Wayside Parks throughout the State, on State highways between cities where they would not interfere with local activities, but would make places where automobiles could stop, find rest, shelter, tables, toilets, telephone, postal accessories and other conveniences; where they could camp over night without cost to themselves or the public. At these parks we would sell gasoline, oil, cigars and other refectory supplies. In other words, the Wayside Park would become self-supporting as to service, the service to be continuous, day and night.

The 1919 Legislature appropriated \$4,000 to try out the experiment, as they considered it, at Wharton Brook. The cost of material and labor was high, yet we did what we could, not as well as we would have liked, but enough to demonstrate its self-supporting service. Wharton Brook was opened August 20, 1919, and up to December 1, 1920, we had taken in \$26,715.96 and expended for supplies and help \$26,042.04, leaving a net surplus December 1 1920, of \$673.92, with all bills paid.

We would like to establish several more of these Wayside Parks during the next two years.

Large enough appropriations having been made by the 1919 Legislature to enable us to purchase land sufficient for the erection of buildings and the development of a bathing beach at Hammonasset, building was begun in April, 1920. The pavilion was opened three months afterward and closed the middle of October. That people desired such a public beach was proved from the beginning. They came there by the thousand.

Only about two-thirds of the plant originally planned was built, and even if the whole had been built it would not have been large enough. The building should be completed for the coming season and provision made for clam-bakes and shore dinners, with accommodations for five hundred people daily and with extra provision of tables to be set in the open for ten or fifteen hundred people at once on special occasions.

I am going to try to answer a question that is often asked. What is the mission of a park? The answer has been given in many ways, generally colored by an individual's view and local conditions. Before answering, I desire to show a vision of several peaks in park history.

Sixty years ago, before State and National Parks were known, the plea for parks was for beauty spots, breathing places, lungs of the city, a skillful gardener's display of flowers and the landscape architect's expression of the ideal combination of walks and lawns, shrubs and trees, waterscapes and running brooks; of rock, hills and plains, with vistas and delusions, with outlooks and inlooks; all striving to make the park most beautiful to look upon and enjoy. In those days we heard nothing of parks being used for playgrounds, nothing of play apparatus or play fields, nor of recreation in any way, for people had not generally called their play "recreation" at that time.

Sixty-five years ago the first public park, voted by a city, paid for from city taxes, was created—Bushnell Park in Hartford. Contemporaneously with it, in response to the general trend of the times, New York, Baltimore, Worcester and other cities created parks. This was from 1850 to 1860. During the Civil War park work stopped and was not generally revived again until fifteen years afterward. Since then it has made great strides until hardly a city in the United States has not some kind of a park. Thousands of acres have been taken and millions of dollars spent for park work.

Thirty-two years ago the first play apparatus was installed in a public park, but playgrounds did not become common until the beginning of this century.

In the old, old days a few people found beauty and harmony in mountains and hills, in valleys and plains, in running waters, in rocks, trees and flowers. In the middle ages, more sought and found the same things in the same way and began to reproduce the many beauties of nature in gardens, by human means. Now in modern life, many are seeking them, seeking them as a community as well as individuals.

I have recalled these things that were the forerunner of our parks in an effort to find a common purpose and underlying principle which pervades them all.

What principle has the old fashioned park and the new fashioned playground in common with, and what is the relation of both to the Egyptian Enclosures, the Hanging Gardens of Babylon, the Greek and Roman Individual Grounds; to the Spanish Plaza, to the French and Italian Gardens and to the English Commons; what to the Oriental and Japanese Art-out-of-Doors, older than any in Europe and absolutely different.

In all ages a few, often many, men have found the sublime and the beautiful in Nature and have tried to reproduce it by human means. What they seek is to express beauty in line, form and color, in response to the love letter they have received.

For what is beauty? I take as my definition, "Beauty is the love letter of the Lord, wooing his people unto Himself." A love letter is communication, where one who has love in his heart de-

sires to gain, or retain, or increase its image within the heart of another.

No matter how crudely it is worded, if love is in the heart of both, it is alive; if neither possess it, it is dead; and if in the heart of man there is no response to the love of his Creator, then he can see no beauty in the loveliness of Nature.

My answer then lies in the words of the Psalmist, "The Lord is my shepherd. . . . He maketh me to lie down in green pastures. He leadeth me beside the still waters. He restoreth my soul." To restore the soul of man is the fundamental principle of all park work.

Playgrounds, recreation fields and recreation interest are destroying, or have destroyed, the desire to use our city parks for their original purpose. Few people come to see our beauty spots, our breathing spaces, and we have only a few to show them. I approve of playgrounds most heartily, but we must seek elsewhere the beauty and grandeur, the restfulness and peacefulness which the city parks were supposed to give us. We must have access to the tops of mountains, the gorges; to water falls, running brooks, great forests of trees, big trees; to the seashore, the lake shore; where we can feel we are out doors without being crowded, where we can be at peace with ourselves. It will take many thousand acres to give all these things to a State like Connecticut, and the State Parks and Forests are at present our only means of finding them.

Nearly all the territory set apart for State Forests and Parks needs little care or expense for its use by the people. Only at those spots where large numbers gather do we need anything like city park treatment; and even where these gathering places are there will be also some great scenic beauty, which will take the attention of the people rather than the buildings and grounds prepared for them. They must have shelter and comfort while there. Anything more would detract from the beauty of the surroundings and be a blot upon it.

To show the changes taking place in city parks, take the City of Hartford as an example. Ten years ago Hartford was excelled by no city for purely park development. Now it has only two real parks, Bushnell Park and Keney Park. All the rest are being transformed into playgrounds. Goodwin, Colt, Pope and Riverside Parks are practically playgrounds and the only thing which prevents Elizabeth Park from being entirely so is the Rose Garden and the Floral Display. What has kept Keney Park as a park, in spite of all attempts to make it a playground, is control by a Board of Trustees. Hartford, with over thirteen hundred acres of parks, of which it was so proud ten years ago, can not prevent them from becoming playgrounds, as I am led to think they ought to be. I most heartily approve of playgrounds; I also believe in parks, as parks.

What hope have any cities of preserving their parks as such? They can not find real parks within their borders. They have to go outside their boundaries, to park lands under the control of the State, where areas are so large that they can not be converted into playgrounds.

State Highways, State Forests, State Parks, unknown twenty years ago, are now recognized and acknowledged throughout the country. They have come to stay. If they do their work they will require large sums of money, but if the money is judiciously expended, in accord with the needs of the people, no dollars can ever be better invested. These projects rank next to education in the work of development for the people.

We ask for \$250,000 for development and maintenance. What would we propose to do with that amount during the next two years? In a general way our plans can be stated as follows:

1. **HAMMONASSET BEACH.** We want to enlarge the bath houses and pavilion to accommodate the crowds which are sure to go there next season.

2. **SHERWOOD ISLAND.** The beach should be made available for use by building bridges, a pavilion with bath houses, and some road work.

3. **HURD PARK.** A new dock is necessary and a shelter pavilion with toilet facilities should be built.

4. **KENT FALLS.** A pavilion of some sort is needed and it might well take the form of a service station with refectory.

5. **WAYSIDE PARKS.** Ten self-supporting service stations could be placed to advantage in various parts of the State.

6. **OTHER PARKS.** Some development work is necessary on other tracts to make them available for public use.

7. **ALL PARKS.** Provision must be made for office expense, supervision and other overhead costs.

Respectfully submitted,

GEORGE A. PARKER,

Chairman Development and Maintenance Committee.

GENERAL STATUTES.

Concerning the Connecticut State Park Commission.

Revision of 1918.

CHAPTER 113.

STATE PARK COMMISSION.

Section 2174. Appointment and terms of office (as amended by Chapter 49, P. A. of 1919). The governor shall, during each regular session of the general assembly, with the advice and consent of the senate, appoint two members of a board to be known as the state park commission to hold office for the term of six years beginning with September first in the year of their appointment; and if any vacancy occurs in said commission the governor shall in like manner appoint a commissioner for the unexpired portion of the term in which the vacancy occurs. The members of said commission shall serve without compensation, but their traveling and other necessary expenses shall be paid by the state. In addition to the members of said commission so chosen, the state forester, the highway commissioner and the commissioner of motor vehicles shall be ex-officio members of said commission.

Sec. 2175.—Powers and duties. Reports. Said commission shall annually choose one of its members to be chairman and may from time to time appoint a clerk and such other employees, including engineers, architects and custodians, as it may deem necessary to carry out the purposes of this chapter, and may determine the duties and compensation of such appointees. Said commission shall have a suitable office where its maps, plans, documents, records and accounts shall be kept, subject to public inspection at reasonable times. On or before the thirty-first day of December preceding each regular session of the general assembly said commission shall make a report of its proceedings to the governor with a statement of its receipts and disbursements.

Sec. 2176. Public reservations; supervision. Said commission shall have charge and supervision of all lands acquired by the state, as public reservations, for the purposes of public recreation or the preservation of natural beauty or historic association, except such lands as may be placed by law in charge and under the supervision of other commissions or officials.

Sec. 2177. Spaces for recreation; power to acquire. Said commission shall have power to acquire, maintain and make available to the public, open spaces for recreation, and to act with local authorities. Said commission may take in the name of the state

and for the benefit of the public, by purchase, gift or devise, lands and rights in land for public open spaces, or take bonds for the conveyance thereof, and may preserve and care for such public reservations, and in the discretion of the commission and upon such terms as it may approve, such other open spaces within this state as may be entrusted, given or devised, to the state by the United States or by cities, towns, corporations or individuals for the purposes of public recreation, or for the preservation of natural beauty or historic association, *provided*, said commission shall not take or contract to take by purchase any land or other property for an amount or amounts beyond such sum or sums as shall have been appropriated or contributed therefor.

Sec. 2178. Condemnation proceedings; parties. The commission is authorized to take by condemnation land for the public purposes for which it is authorized to acquire land under the provisions of section 2177, and if it cannot agree with the owner or owners of any land which it shall decide the interests of the state require for such purposes, as to the compensation to be paid therefor, the amount of damages for such taking shall be determined by three appraisers to be appointed by the superior court for the county in which such land is situated, or any judge thereof, on application of said commission after reasonable notice of such application shall have been given to such owner or owners. All the owners of different tracts of land which are contiguous or which are to be included in the same park or recreation space may be joined in one application, if convenient, and the court or judge may appoint a single board of appraisers to determine and award the compensation to be paid to the owners of each tract in the same report of their findings.

Sec. 2179. Hearing and award; appeal. Said appraisers shall notify all parties in interest of the time and place of hearing, and shall make return in writing of their appraisal and award to the clerk of the superior court, who shall record the same; and the amount of such award shall be paid upon order of the comptroller within sixty days after the filing of such award, or, in case of an appeal, after the final award, out of any appropriated funds available therefor, to the person or persons entitled thereto, or held on deposit to the order of such person or persons by the treasurer of the state. Either party may within sixty days appeal to the superior court, or to any judge thereof, to set aside such award, and to order a new hearing because of any irregularity or improper conduct connected with such hearing or appraisal.

Sec. 2180. Fees of appraisers. Payment of award. The fees of the appraisers shall be paid from the funds aforesaid; and the lands embraced in the application shall not be occupied by said commission, nor taken for such public purposes until the compensation therefor as finally awarded shall have been paid to the person or persons entitled thereto, or deposited to his or their order.

Sec. 2181. Powers of comptroller. The comptroller is authorized, with the approval of said commission, to receive and hold in trust for the state, exempt from taxation, any grant or devise of land or rights in land and any gift or bequest of money or other personal property made for the purposes of this chapter, and shall preserve and invest any funds so received in such securities as trustees are permitted to invest in. Such invested funds shall be known as the state park fund, and shall be used and expended under the direction of said commission and subject to its orders.

Sec. 2182. Transfer of control of open spaces. Any town or other municipality is authorized to transfer the care and control of any open spaces owned or controlled by it to the commission upon such terms and for such periods as may be mutually agreed upon, or to enter into any agreement with said commission for the joint care or preservation of open spaces within or adjacent to such town or municipality, and said commission may in like manner transfer the care and control of any open spaces controlled by it to any local public authorities upon such terms and for such periods as may be agreed upon.

Sec. 2183. Rules and regulations. The commission shall have power, with the approval of the governor, to make and alter rules and regulations for the maintenance of order, safety and sanitation upon the lands in its control and for the protection of trees and other property and the preservation of the natural beauty thereof, and to affix penalties not exceeding a fine of twenty dollars for violation of such rules and regulations. Such rules and regulations shall be posted in conspicuous places upon such lands.

Sec. 2184. Animals for public parks. The commissioners or custodians of any state, county or municipal park may accept, either by purchase or gift, for free exhibition purposes only, any fish, crustacean, bird or animal.

Sec. 2185. State Park Commission may lease camp sites and buildings. The State Park Commission may execute leases of camping sites and buildings on the state parks for limited periods, and use the proceeds from such leases and any other income resulting from the use of state parks, for the care, maintenance and improvement of the same, and shall render to the board of control annually an account of all such transactions.

REPORT OF THE TREASURER.

COMPTROLLER ACCOUNT.

APPROPRIATIONS, 1917.

For Purchase of Land.....	\$20,000.00	
<i>Expenditures</i>		
Previously reported, to September 30, 1918.....		\$11,291.95
<i>Expended Oct. 1, 1918 to June 30, 1919.</i>		
Acquisition of land.....	\$6,892.73	
Bolton Notch.		
Sap Tree Run.		
Buttonball Brook.		
Wharton Brook (part).		
Macedonia Brook Survey.....	1,484.00	
Incidental expenses.....	331.32	
	\$8,708.05	8,708.05
		\$20,000.00
 For Expenses of Commission.....	 \$5,000.00	
<i>Expenditures.</i>		
Previously reported, to September 30, 1918.....		\$2,451.58
<i>Expended Oct. 1, 1918 to June 30, 1919.</i>		
Salary and expenses, Field Secretary.....	\$2,086.17	
Commissioners' traveling expenses, etc.....	131.68	
Printing of report	162.00	
Blue prints and field books.....	59.95	
Office equipment and supplies.....	88.84	
Unexpended balance.....		2,526.64
		19.78
		\$5,000.00

COMPTROLLER ACCOUNT.

APPROPRIATIONS, 1919.

For Purchase of Land..... \$200,000.00

Expenditures.

July 1, 1919 to June 30, 1920.

Acquisition of land..... \$174,733.57

Wharton Brook (add'n)
house and lot

Hammonasset Beach... 549 acres

West Peak..... 100 "

Black Pond..... 100 "

Devil's Hop Yard..... 860 "

Macedonia Brook (addi-
tion)..... 96 "

Wooster Mountain.... 100 "

Kent Falls (addition)... 19 "

Lake Waramaug..... 75 "

1,899 "

Incidental expenses..... 3.043.21

\$177,776.78

\$177,776.78

Unexpended balance, July 1, 1920..... 22,223.22

\$200,000.00

For Development of Parks..... \$100,000.00

Expenditures.

July 1, 1919 to June 30, 1920.

Pay roll labor..... \$19,718.12

Material and expert labor..... 52,444.94

\$72,163.06

\$72,163.06

Unexpended balance, July 1, 1920..... 27,836.94

\$100,000.00

For Maintenance of Parks..... \$15,000.00

Expenditures.

July 1, 1919 to June 30, 1920.

Pay roll labor..... \$2,882.46

Supplies..... 5,009.10

\$7,891.56

\$7,891.56

Unexpended balance, July 1, 1920..... 7,108.44

\$15,000.00

SUMMARY OF EXPENDITURES.

July 1, 1919 to June 30, 1920.

Purchase of Land.....	\$177,776.78
Development of Parks.....	72,163.06
Maintenance of Parks.....	7,891.56
	\$257,831.40

Expended for

Commissioners' expenses.....	\$ 268.06
Office: supplies and clerical service	1,791.84
All Parks: Field Secretary, General Superintendent, etc.....	6,977.09
Wharton Brook.....	10,903.31
Macedonia Brook.....	6,312.38
Hurd Park.....	52.18
Mount Tom.....	6.72
West Peak.....	11,400.00
Devil's Hop Yard.....	27,411.99
Hammonasset Beach.....	174,312.18
Kent Falls.....	1,895.65
Black Pond.....	1,500.00
Lake Waramaug.....	10,000.00
Wooster Mountain.....	5,000.00
	\$257,831.40

SPECIAL APPROPRIATION, 1919.

For Wharton Brook.....	\$4,000.00	
Expended in construction of Pavilion.....		\$4,000.00

SPECIAL APPROPRIATION, 1917.

For Mount Tom.....	\$3,000.00	
Unexpended to July 1, 1920.....		\$3,000.00

GIFTS

Gift of E. M. Burnham—for Mount Bushnell	\$500.00	
Endowment—Interest only available.		
Invested in Liberty Bond ($4\frac{3}{4}$, first series, converted).		
Gift of Russel Dart—for Dart Island	200.00	
Endowment—Interest only available.		
Invested in four \$50 Liberty Bonds ($4\frac{1}{4}$ per cent. first and fourth series).		
Gift of Russel Dart—for Dart Island	50.00	
Expended for labor on improvement		\$44.85
Unexpended balance, July 1, 1920		5.15
		\$50.00
Gift of White Memorial Foundation—for Macedonia Brook, July, 1919	\$200.00	
Expended for surveys and maps		\$192.39
Unexpended balance, July 1, 1920		7.61
		\$200.00
Gift of White Memorial Foundation—for Macedonia Brook, January, 1920	\$2,500.00	
Unexpended balance, July 1, 1920		\$2,500.00

CASH ACCOUNT.

October 1, 1918 to June 30, 1919.

Cash balance brought forward, Sept. 30, 1918.....	\$ 203.65
Trust funds and interest brought forward, Sept. 30, 1918.....	526.00
Received for Macedonia Brook (White Foundation)	500.00
Revenue from park rents and sales.....	337.06
	\$1,566.71

Investment, Trust Fund (Burnham).....	\$ 500.00
Expended on Macedonia Brook.....	460.48
" " Wharton Brook.....	97.08
" " Hurd Park.....	14.70
Unexpended balance, carried forward, June 30, 1919.....	494.45
	\$1,566.71

July 1, 1919 to June 30, 1920.

Cash balance brought forward, July 1, 1919.....	\$ 494.45
Income of Service Operations at Wharton Brook...	10,379.13
Revenue from park rents and sales.....	1,607.62
	\$12,481.20

Expended for Refectory at Wharton Brook.....	\$10,231.50
" on Wharton Brook.....	461.08
" " Hammonasset Beach.....	183.98
" " Macedonia Brook.....	64.84
" " Devil's Hop Yard.....	6.00
" " All Parks: auto maintenance, etc.....	21.42
Unexpended balance, carried forward, June 30, 1920.....	1,512.38
	\$12,481.20

Respectfully submitted,

GEORGE A. PARKER,

*July 1, 1920.**Treasurer.*

HARTFORD, CONN., August 27th, 1920.

This is to certify that we have audited the accounts of George A. Parker, Secretary and Treasurer of the Conn. State Park Commission, for the period beginning July 1st, 1919, and ending Aug. 23rd, 1920. Have compared the same with the vouchers therefor and find them correct.

(Signed)

WILLIAM P. BAILEY,

LEWIS W. PHELPS,

Auditors of Public Accounts.





Yours truly
N. Lyon

(From Woodward's Life of General Lyon, 1862)



BIRTHPLACE OF NATHANIEL LYON
(From Woodward's Life of General Lyon — 1862)



EASTFORD

OLD CHIMNEY, 1920

NATHANIEL LYON MEMORIAL



MADISON

1919

HAMMONASSET BEACH



MADISON

PAVILION, 1920

HAMMONASSET BEACH



MADISON

MAIN FLOOR—PAVILION.

HAMMONDASSET BEACH



MIDDLEFIELD

BLACK POND



KENT FALLS

UPPER FALL

KENT



KENT

SOME OF THE LOWER FALLS

KENT FALLS



EAST HADDAM

OLD PICNIC GROUND

DEVIL'S HOP YARD



DEVIL'S HOP YARD

CHAPMAN FALLS

EAST HADDAM



NORTH HAVEN AND WALLINGFORD

SERVICE STATION

WHARTON BROOK

State of Connecticut
PUBLIC DOCUMENT No. 22

QUADRENNIAL REPORT
OF
INDEBTEDNESS
AND
EXPENDITURE
OF
COUNTIES, TOWNS, CITIES,
BOROUGHs, AND FIRE
DISTRICTS
AS OF FISCAL YEAR ENDED NEXT PRIOR TO
OCTOBER 11, 1920

COMPILED BY THE TAX COMMISSIONER



HARTFORD
PUBLISHED BY THE STATE
1921

PUBLICATION
APPROVED BY
THE BOARD OF CONTROL

THE TUTTLE, MOREHOUSE & TAYLOR PRESS
NEW HAVEN, CONN.

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William H. Blodgett,
Tax Commissioner.

State of Connecticut
OFFICE OF THE TAX COMMISSIONER,
HARTFORD, DECEMBER 31, 1920.

The Tax Commissioner is required by Section 1257 of the General Statutes to publish quadrennially information relative to the indebtedness and expenditure of the counties, cities, boroughs, towns and fire districts of the state. In conformity with that section, the following statement of municipal debt and expenditure is herewith submitted.

The following form was sent to the Treasurer of each of the foregoing subdivisions of the state:

State of Connecticut

1920

QUADRENNIAL RETURN

OF

MUNICIPAL DEBT AND EXPENDITURE

OF

County
Town
City
Borough
Fire District

To be returned on or before October 11, 1920.

SECTION 1256, General Statutes, Revision of 1918:

The treasurer of every county, city, borough, fire district, and town shall, on the second Monday of October, 1920, and in every fourth year thereafter, make and return to the tax commissioner a statement, under oath, of all items of the total indebtedness, and the date thereof, of such county, city, borough, fire district or town, as of the last day of the fiscal year next preceding such return; the purpose for which such indebtedness was incurred, the form in which the same exists, and when payable; the amount raised by such corporation during such fiscal year next preceding by taxation and by loan, and the amount expended during such period for interest, roads, paupers, salaries, schools and police and fire departments, and the tax rate in mills laid during said period, and such additional information regarding the same as the tax commissioner may require. Every such officer who shall fail to make and return such statement within one month after the time limited herein shall forfeit to the state one hundred dollars.

All data furnished should be for fiscal year ended next prior to
October 11, 1920.

To the Tax Commissioner:

Sir: The following is a true statement of the indebtedness of the County Town City Borough Fire district of.....on the close of its fiscal year next prior to the eleventh day of October, 1920, and of its expenditures for the year next preceding as required by Section 1256 of the General Statutes, Revision of 1918.

In answering all the questions on this page, list each bond issue separately and indicate for what purpose it was created.

INDEBTEDNESS.

As of close of fiscal year....., 19 .
(For the fiscal year ended next prior to October 11, 1920.)

1. Funded indebtedness:

a. Water works and water supply:

Date incurred	Purposes of creation	Form: registered or coupon, etc.	Interest rate	Date of maturity	Amount
.....			%		\$.....
.....					
.....					
.....					
Total water indebtedness,					\$.....

b. All purposes except water works and water supply:

Date incurred	Purposes of creation	Form: registered or coupon, etc.	Interest rate	Date of maturity	Amount
.....			%		\$.....
.....					
.....					
.....					
.....					
.....					
.....					
Total except water works, etc.					\$.....
Total funded indebtedness,					\$.....

2. Floating indebtedness:

Including school and town deposit funds if appropriated to town use, outstanding notes, warrants, town orders, and temporary loans.

Date incurred	Purposes of creation	Form	Interest rate	Date of maturity	Amount
.....			%		\$.....
.....					
.....					
.....					
.....					
.....					
.....					
Total floating indebtedness,					\$.....
Total funded and floating indebtedness,					\$.....

3. Sinking fund:

Date created	Purposes for which created	Form	Rate of interest secured%	Date of maturity	Amount
.....					\$.....
.....					
.....					
Total sinking fund,					\$.....
Net indebtedness,					\$.....

4. Total funded and floating net indebtedness of all school districts \$.....
(Applies only to towns and consolidated cities having school districts.)

RECEIPTS AND EXPENDITURES.

For the fiscal year ended....., 19 .

(For fiscal year ended next prior to October 11, 1920.)

Answer all questions which apply in any way to your municipality

SOURCES OF RECEIPTS.		Amount
5. All local taxes.....		\$.....
6. Taxes on shares of stock of certain corporations.....		
(Amount received by town before distribution to taxing districts\$.....)		
6½ Penalty tax.....		
7. Special street assessments.....		
8. Water works and water supply.....		
9. State: for roads, city streets and bridges.....		
10. State: for charities.....		
(Hospitals, almshouses, paupers, insane, etc.)		
11. State: for schools.....		
12. Licenses		
13. Court fines, forfeits, and penalties.....		
14. Temporary or other loans.....		
15. Other miscellaneous sources.....		

Detail of items included under No. 15.

.....	\$.....
.....	
.....	
.....	
.....	
.....	

16. Total of 5 to 15, inclusive..... \$.....
17. Balance at beginning of year.....
18. Total \$.....*

* These amounts must be equal.

QUADRENNIAL REPORT

OBJECTS OF EXPENDITURES.

[illegible]

MISCELLANEOUS INFORMATION.

40. Amount due and collectible from taxes or other sources	\$.....
41. Last completed grand list of this municipality.....	\$.....
42. Percentage of net indebtedness to value of grand list..	%
(Found by dividing the net indebtedness by the last grand list.)	
43. Increase of indebtedness, if any, during the fiscal year ended next prior to the eleventh day of October, 1920...	\$.....

44. Decrease of indebtedness, if any, during the fiscal year ended next prior to the eleventh day of October, 1920, by payment from sinking fund..... \$.....
45. Estimated number of present inhabitants.....
46. Per capita indebtedness..... \$.....
(Found by dividing the net indebtedness by the estimated number of present inhabitants.)
47. Tax rate laid on last grand list, mills, and its equivalent in dollars per thousand..... \$.....
48. Total amount to be raised from the above tax levy.... \$.....
(Personal tax to be excluded.)
49. Last average school district tax rate in towns not under consolidated system for year preceding, mills, and its equivalent in dollars per thousand..... \$.....
50. Estimated total amount to be raised from the above tax levy in the different school districts..... \$.....
51. Per capita town taxation..... \$.....
(Found by dividing the amount to be raised by taxation, including school districts if any, in case of a town, by the estimated number of present inhabitants.)
52. Total tax rate in the city, borough, or fire district, including town and school district taxes mills, and its equivalent in dollars per thousand..... \$.....
53. Per capita city, borough, or fire district, total taxation... \$.....
(Found by dividing the amount to be raised in the city, borough, or fire district from all tax levies, including town and school district, by the estimated number of present inhabitants in the above municipality.)

.....Treasurer.

STATE OF CONNECTICUT }
COUNTY OF } ss.

.....Treasurer of County, Town, City, Borough, or Fire District of.....County of
this day ofA. D. 1920, appeared before me and made oath to the truth and correctness of the foregoing statement.

.....

Notary Public.

MUNICIPAL ACCOUNTING

In the preparation of this quadrennial report every effort has been made to attain the highest degree of accuracy and to make the information contained in the report dependable. If the facts and figures given in such report are not accurate, the report itself falls, and there is thereby incurred a useless expense upon the state.

In the biennial report of this department published and covering the years 1919 and 1920 comment was made upon the difficulty which the department experienced in procuring from officers in certain towns, boroughs and fire districts the information required to be furnished to the department by the provisions of the General Statutes. In that report it was stated that the difficulties arise from the fact that the town officers themselves are able to procure accurate information in respect to the finances of their own towns only with the very greatest difficulty. These difficulties were attributed to the very crude and sometimes shiftless methods of business and accounting in use in such municipalities. We have experienced even greater difficulties in the preparation of this quadrennial report than had been encountered in compiling the biennial report referred to or in compiling the annual report upon the assesement and collection of taxes.

On the opposite page is a fac-simile of the report received by this department from one of the town treasurers. The town referred to had no receipts from special street assessments, water works or from the state for roads or bridges. It had no expenditures, as shown in items 25, 26 or 27 for police department, recreation, parks or gardens or for a fire department. The treasurer, however, was supposed to furnish information with respect to the other thirty items called for in the blank form sent forward to him. Instead of furnishing us thirty items, each containing essential information, he furnished in addition to items 17 and 38 only such items as are included within the circles in the fac-simile; in other words, the treasurer furnished information with respect to items 5, 11, 15, 16, 17, 18, 24, 36, 37, 38, and 39. The figures furnished for item 15 were the aggregate of most of the items 6 to 15 inclusive; and this department, in order to procure the essential detail of the town's business, was obliged to ascertain from one source or another the manner of procuring the aggregate of receipts from these several sources. This information was obtained in the instant case from reports of other officials of that particular town and by deduction. We believe these figures published in this fac-simile report opposite items 6, 10, 11, 12, 13, 14 and 15 thus obtained are accurate. In like manner was obtained separately the figures in items 19, 20, 21, 22, 23, 28, 29, 30, 31, 34, 35 and 36, for the treasurer did not

furnish us anything except the aggregate of these items, and the aggregate so furnished was found to be incorrect.

A-99

RECEIPTS AND EXPENDITURES

For the fiscal year ended Aug 31, 1922

(For fiscal year ended next prior to October 11, 1994.)

Answer all questions which apply in any way to your municipality.

[illegible]

None of the figures on this sheet of this report were correct except items 5, 17, 24 and 38.

This was one of the smaller towns of the state, but from this single case anyone studying this report may comprehend something of the difficulties encountered when 168 towns, eight

unconsolidated cities, twenty-one unconsolidated boroughs and forty-eight fire districts are required to make like reports to the department. It is most unpleasant to comment upon the inaccuracy of the work of any of the town officials; yet this report would be incomplete if we did not point out the most glaring difficulty to be found in the conduct of the municipal affairs of this state. If the treasurer of the town referred to was unable to quickly gather from his own books or from books kept by other officials the information required, the difficulty lies in the inadequacy of the town's system of accounting. In the case referred to, undoubtedly the treasurer was unable, without great effort, to supply the information required to be furnished. In some cases, the department has been confronted with the necessity of continuing correspondence with town treasurers, because we were unable to ascertain from the town report, or by any other means, accurate information. We have obtained it in a number of cases by communicating and asking for the specific information.

It may be presumed, therefore, in view of the inaccuracies of reports to us that efforts to attain a higher degree of accuracy in compiling the figures contained in this quadrennial report may have failed. We believe, however, that the figures are generally reliable. While it is most disagreeable to thus point out the shortcomings of those who have sent reports to us, this comment will be received as having been made with no purpose other than to be helpful. We hope to procure a spirit of accuracy among officials in dealing with the serious matter of taxation and finance within the several towns of the state.

The subject of accounting may well be discussed in town meetings, and among the leading citizens of the towns and municipalities. In many cases it would be most appropriate and money well expended to employ qualified accountants to install new systems of accounting, particularly in towns where this subject has not had specific attention in recent years. An unnecessarily elaborate and difficult system is quite as unsatisfactory as one which is old and found inadequate, but there need be no difficulty if good judgment is used in the installation of an accounting system to procure one which is simple and in the end will result in attaining a vastly higher degree of business efficiency and a more economic and systematic conduct of public

business. I emphasize the very great necessity of giving this matter attention in the municipalities of the state.

BOARDS OF FINANCE

Within late years many of the towns of the state have established boards or departments of finance. To the present time without exception these boards have proven most useful in the management of the towns wherein they have been so established. Except in the largest cities, members of these boards serve without compensation, and thus representative citizens particularly qualified to deal in financial affairs are secured to serve on such boards. Such service is rendered in the discharge of what men of this character feel to be their civic duty.

The members of boards of selectmen and of boards of wardens and burgesses and other town officials are, as of course, in familiar touch with the financial affairs of the towns wherein they reside; but it very frequently happens that other citizens give little attention to the detail of the finances of such municipalities. Any instrumentality which brings the financial detail of their towns, cities and boroughs to the constant consideration of a greater number of the citizens who are responsible for the payment of taxes and particularly of such citizens as are best able to understand financial management can have none other than a salutary effect in the communities wherein such course is followed. In the municipalities where boards of finance exist, it will be found that a sound, basic financial policy has been adopted; and by reason of the acquaintance of the character of the men referred to with such policy, it is maintained in town meetings and throughout the years to the advantage of such communities.

Such boards of finance may be established without special enactment of the General Assembly under the authority of provisions of Chapter 27 of the General Statutes. Any town which is without a board of finance may well consider the advantage of establishing such board. I recommend the establishment of boards of finance in all towns wherein they do not exist.

PREPARATION OF A BUDGET BY THE SELECTMEN

The 1917 General Assembly, by legislative enactment, Section 1251, of the general statutes, attempted to check the grow-

ing habit on the part of the towns of spending more than they received. That Section requires the selectmen of each town in their annual report to be submitted at the annual town meeting to include an itemized estimate of the current expenses of the departments of the town for the ensuing year. After the Board of Relief has completed its work, the town is required to levy a tax sufficient in amount to meet the estimated expenses for the ensuing year, plus the deficit, if any, of the preceding year. In spite of this requirement of the statutes, the selectmen of seventy of the one hundred and sixty-eight towns of the state did not include in their last reports to the towns a budget of estimated current expenses for the ensuing year. The pay-as-you-go-along policy cannot be too strongly emphasized for towns. The financial difficulties of many of the municipalities will be overcome when they follow the requirements of the statutes of raising a sufficient amount in taxes to cover the expenses of the ensuing year.

CHECK-UP BY THE TAX DEPARTMENT OF THE 1920 QUADRENNIAL REPORT FROM THE MUNICIPALITIES

A good idea as to the checking up of the returns received from the Treasurers of counties, cities, boroughs, towns and fire districts by the tax department may be obtained from the following department memorandum. Great care was taken by the department in the checking up of the reports, inasmuch as the original report from the Treasurer was, as a rule, in bad shape. In the majority of instances, the figures given on the Treasurer's Quadrennial Report did not agree with the printed figures given in the printed report of the municipality.

INSTRUCTIONS FOR CHECKING UP THE 1920 QUADRENNIAL RETURN

This return is made by the treasurer of every county, city, borough, fire district and town for the fiscal year of such municipality ended next prior to the second Monday of October, 1920.

Care should be taken in seeing that the treasurer is reporting for the proper fiscal year. In some cases the treasurer does not show the fiscal year for which he is reporting; in such cases, it will be necessary to write him on that point.

The treasurer's quadrennial return is to be checked up with the printed report of the municipality. All municipalities subject to the making of the quadrennial return will have a printed report, with the exception of counties, a few boroughs and the fire districts. Where the municipality does not issue a printed report, the quadrennial return of the treasurer must be checked as best as is possible with the report as made four years previous.

CHECKING UP OF RECEIPTS AND EXPENDITURES

Before attempting to check the individual items of receipts and expenditures of the treasurer's report, the total as shown by the treasurer should first be checked up with the totals in the printed report. If the totals of the two reports do not agree, an investigation must be made as to the reason why the treasurer, in his quadrennial return, does not show the same total as in his printed report. If the totals of the two reports agree, attention must be paid to the printed report itself. The town treasurer, in his printed report, shows selectmen's orders paid and town school committee orders paid. Such amounts may not check up with the amounts as shown by the selectmen, and by the town school committee reports. The difference is usually due, in case of the selectmen's expenses, to the fact that the town treasurer shows the selectmen's orders actually paid during the year, while the selectmen themselves have reported on the orders actually issued during the year. In order to reconcile the town treasurer's printed statement with the selectmen's printed totals, it is necessary to take into account the orders outstanding at the beginning and the end of the year. The selectmen's orders paid by the town treasurer during the year, plus the orders outstanding at the end of the year, minus the orders outstanding at the beginning of the fiscal year will equal the orders shown by the selectmen.

As the quadrennial return should only show the expenditures actually incurred during the fiscal year, orders paid by the town treasurer for a preceding fiscal year should not be shown. Orders outstanding at the end of the fiscal year, but not paid by the treasurer, should be shown.

In case of the town school orders, the town treasurer on the

printed report may not agree with the amounts shown by the town school committee, because the town school committee is reporting on the school year ended July 1st, whereas the town treasurer is reporting on the school orders paid during the fiscal year of the town. Where the town school committee is not reporting on the same fiscal year as that of the town, it will be necessary to use in item 24 on the expenditure side of the quadrennial return the actual orders paid, as shown by the printed town treasurer's report. Where the treasurer and the town school committee are reporting on the same fiscal year, it will be necessary to check up the town treasurer's orders paid with the town school committee's orders issued by taking into account the orders outstanding at the beginning and the end of the year.

In arriving at the amount in item 17, "balance at the beginning of the year," there should be subtracted from the cash at the beginning of the year, as shown on the printed report, the selectmen's and town school committee orders outstanding at the beginning of the year. Similarly, in obtaining the amount for item 38, the selectmen's and town school orders outstanding at the end of the year should be subtracted from the cash on hand at end of year. Items 19 to 36 inclusive, expenditures, should show the actual expenditures of the selectmen and town school committee incurred during the fiscal year, whether paid or not. These items should not show amounts paid out on a preceding fiscal year.

SOURCES OF RECEIPTS

The amount of receipts of the municipality during the fiscal year usually agrees with that shown in the printed town treasurer's report of receipts. However, it may be necessary to add to the total of town treasurer's receipts, as shown by the printed report, the amount received from special departments, such as water, gas or electrical department.

In case a municipality is cut up into several taxing districts, the amount of receipts will equal the totals of receipts, as shown by the various district treasurers, minus inter-district transactions.

Item 5. "All local taxes." Under this heading comes all taxes received by the municipality, including amounts received from interest and liens on over-due taxes. Item 5 does not

include special assessments, such as for sewer, electric lights, abatement of taxes, etc.

Item 6. "Taxes on shares of stock of certain corporations." In this item is shown the amount actually retained by the municipality because of stock tax. In case a town has within its limits other incorporated taxing districts, Item 6 should not show the amounts paid by the town treasurer to the treasurers of these other incorporated taxing districts.

Item 6½. "Penalty Tax." Only towns, consolidated towns and cities, and consolidated towns and boroughs will show the penalty tax. Other incorporated municipalities will not.

Item 7. "Special Street Assessments." Under this item will be shown assessments levied apart from the usual taxes of the town, such as assessments because of sewers, street lights, curbs, etc., of a nature tending to improve the abutting property. In item 7 will be included interest and liens paid on over-due assessments.

Item 8. "Water works and water supply." In this item will be shown the actual receipts from the water department of the municipality.

Item 9. "Receipts for roads, city streets and bridges." In this amount should be shown not only receipts from the state but also from all other sources, which will tend to offset the expenditures of roads, city streets and bridges. Money received for sewer repairs and construction may go here.

Item 10. "Charities." This item will include the receipts from the state and from all other sources, because of the care of poor in hospitals, almshouses, insane asylums, etc. Amounts received from relatives because of the care of individuals by the town should be shown here.

Item 11. "Receipts for Schools." Here should be shown receipts from all sources for school purposes. The great majority of such receipts will be from the state, because of average attendance grant, enumeration grant, teacher's aid grant, special aid grant, night schools, transportation and high school tuition. Here should be included interest from the town deposit fund.

Item 12. "Receipts from licenses." All receipts from licenses, such as peddlers' licenses, hunters' licenses, dog licenses and liquor licenses should be shown here.

Item 13. "Court fines, forfeits and penalties." This item includes costs, fines and penalties imposed by the justice of the peace or by the city court.

Item 14. "Temporary or other loans." This item includes all loans, whether funded or floating, incurred during the fiscal year. If a town has paid any indebtedness by using money from a sinking fund, item 14 should show the amount obtained from the sinking fund in order that such amount may offset item 35.

Item 15. "Other miscellaneous sources." This item should be as small as possible and should show only such items as cannot be included in the preceding eleven headings.

Item 17. This item is the balance on hand at the beginning of the fiscal year. Balance on hand at the end of the fiscal year may or may not agree with the cash on hand. If the town had any orders outstanding at the end of the preceding fiscal year, from the cash on hand should be deducted the orders issued but not paid, in order to show in item 17 the true status of the town at the beginning of the fiscal year. Item 17 may at times show a deficit. In cases of a deficit, the amount should be starred and a foot note should be shown at the bottom of the page indicating such fact. Item 18 will then be gotten by subtracting item 17 from item 16.

OBJECT OF EXPENDITURES

Item 19. In salaries of executive officers should be included the salaries only of the executive officers themselves, not their clerks or assistants. The salary of the chief of the fire department, police department, health officer, head of water works or commissioner of parks should not be shown in item 19, but should be shown in the proper item below.

Item 20. This item includes all general administrative office expenditures, such as amounts paid out for up-keep of town hall, for heat, printing, rent, stationery and supplies. In this item is also included salaries of assistants, typists, etc.

Item 21. Here should be shown not only all expenditures on roads, streets and bridges, but also expenditures because of street lights, construction of sewers, installation of curbs, etc.

Item 22. All expenditures for courts, judges and prosecuting attorney charges should be shown here.

Item 23. Expenditures for charities will include all amounts

spent for such purposes, as poorhouses, up-keep of paupers in insane asylums, hospitals, etc. This item would also include amounts paid on account of the soldiers' relief for themselves or their families.

Item 24. "Schools." Everything connected with the ordinary up-keep of schools, tuition expenses for sending pupils to other municipalities, for repairs of school buildings will be shown here. Construction of new schoolhouses will be shown in item 29.

Item 26. "Recreation." This item represents the amounts spent on parks, playgrounds and care of public greens, purchase of new land for park purposes, etc.

Item 27. "Fire Department." This amount includes all expenditures by the fire department and includes amounts spent for new equipment and for the up-keep of the old, as well as the salaries of the chief and his assistants.

Item 28. "Sanitation and Health." Health officers' fees, street sprinkling, collection of garbage, sewer cleaning, are to be shown here.

Item 29. "Public Buildings." Amounts paid for the construction of town halls, schoolhouses and other public buildings and for the improvements and additions to such public buildings are shown here. Repairs of an ordinary kind, such as are necessary to replace ordinary wear and tear, should not be shown under this heading, but under previous items. Repairs of a substantial nature, however, such as a realteration of a building, will be shown here.

Item 30. "Water works and water supply." Here should be included the ordinary expenses of the water department.

Item 30½. Taxes paid to the state, county and military tax should be shown here. So called dog taxes, dog licenses should be shown under item 36.

Item 31. "Interest on total indebtedness." The amounts paid on all interest-bearing indebtedness, for whatever purposes issued, should be shown in this item.

Items 32 and 33. "County Home and County Jail." Only the counties will show any expenditures under these headings.

Item 34. "Sinking Fund." Amounts set aside during the fiscal year for the specific purpose of reducing existing indebtedness are to be shown in this item.

Item 35. "Reduction of Indebtedness." All indebtedness actually paid off during the year will come under this heading.

Item 36. "Other Miscellaneous Expenditures." This item, as item 15, "Other Miscellaneous Receipts," should be as small as possible and should show only expenditures which cannot be put under any other item. Welcome Home celebrations will be shown here.

Item 38. "Balance on hand at end of the year." In order to obtain the actual status of the municipality at the end of the year, non-interest bearing orders and bills payable should be deducted from the cash on hand.

INDEBTEDNESS AS OF CLOSE OF FISCAL YEAR

Indebtedness is of two sorts—funded and floating indebtedness. Funded indebtedness usually represents indebtedness incurred because of the construction of something which will last for several years, or bonds which have been issued by the municipality to take the place of matured bonds or notes of a temporary nature. Bonds which have been issued to take the place of previously incurred indebtedness are called funding or refunding bonds. The funded indebtedness has been divided into two sub-divisions—bonds issued for water department of the municipality, and bonds issued for other purposes.

Floating indebtedness. This may include town orders which have been issued at a definite rate of interest. Floating indebtedness should not include bills and accounts payable, or non-interest bearing orders outstanding at the end of the year. If the towns have appropriated town deposit and other trust funds for their own use, the amounts actually appropriated from such funds should be shown under a separate item. The purpose of the creation of indebtedness, whether funded or floating, should be shown as fully as possible. It may be necessary to write to the town treasurer for fuller information relative to the purposes of creation of indebtedness. Many of the towns have funding bonds which were issued to take the place of temporary indebtedness. In the days of loose finance, instead of having the receipts equal the expenditures, notes were issued to offset the excess of expenditures over receipts. Then in turn these notes were replaced by refunding bonds. There is great difficulty in accurately cutting up the issue of bonds of this nature so as to be able to show the various purposes of creation.

The report to be printed by this department shows:

(1) Funded indebtedness as distinguished from floating indebtedness with a sub-division of the funded indebtedness into water bonds and bonds other than water bonds.

(2) The purpose of creation of indebtedness. Here all interest-bearing indebtedness is grouped together, whether bonded or floating. Particular attention in checking up the interest-bearing indebtedness of the town should be shown to the interest rate and date of maturity. These items will be used in the report.

In case of a serial issue of bonds, the first and last dates of maturity should be shown. The average interest rate on interest-bearing indebtedness may be obtained by adding together a year's interest on each issue and dividing by the total amount of indebtedness. The average interest rate should be shown to the nearest quarter of a per cent.

SINKING FUND

Only amounts which have been set aside by the municipality for the purpose of paying off indebtedness actually incurred should be shown here. Cash on hand at the end of the year or the excess of assets over liabilities of the town should not be included under sinking fund. Only amounts laid aside for the one specific purpose of paying off indebtedness when it matures should be shown.

COMPARISONS

The total net indebtedness of all counties, cities, boroughs, towns and fire districts of the state is \$73,430,770.74, an increase of \$18,338,911.20, or 33.29%, since the report of 1916. The total net indebtedness of the counties is \$922,000, an increase of \$353,657.75, or 62.23%, since 1916. Of the eight counties of the state, two show an increase, three a decrease in indebtedness, and the remaining three show no change, having no debt in 1912, 1916 or 1920.

The school districts in the towns where the schools are not operated entirely by the municipality itself have a total indebtedness of \$4,595,018.93, a slight increase over the amount given in 1916. Three towns which four years ago had separate school districts have during the interim done away with school districts.

In these instances the entire cost of schools is now being carried by the town itself.

At the present time there are eight cities whose governments are not consolidated with those of the town. In these eight cities, four had an increase in indebtedness during the past four years, while the other four showed a decrease. To-day there are twenty-two boroughs in the state. In 1916 there were twenty-five. Since 1916 the Borough of Shelton has become a city. Bethel and Fair Haven, East, have gone out of existence. Only one of the present boroughs, namely, Naugatuck, has the borough government consolidated with the town government. In the other twenty-one boroughs, six showed an increase of indebtedness, eleven a decrease in indebtedness, and four no change in the indebtedness of 1920, as compared with that of 1916. There are one hundred and sixty-eight towns in the state; seventy-eight of these towns have shown an increase of indebtedness; eighty-three a decrease; five towns have the same indebtedness as in 1916, and the remaining two towns had no indebtedness either in 1916 or in 1920.

The following municipalities reported no indebtedness whatever:

Counties	Towns	Boroughs	Fire Districts
Litchfield,	Avon,	Bantam,	Addison (Glastonbury),
Middlesex,	Hartland,	Branford,	Allingtown (Orange),
New Haven,	Simsbury,	Colchester,	Center (West Hartford),
Tolland.	Suffield.	Newtown,	East Haddam,
		Woodmont.	East Hampton,
			East Side (W. Hartford),
			Falls Village (Canaan),
			Glastonbury,
			Haddam Center,
			Hazardville,
			Hebron (Glastonbury),
			Higganum (Haddam),
			Kent,
			Lakeville,
			Moodus (East Haddam),
			Naubuc (Glastonbury),
			Oakville (Watertown),
			Pine Meadow (New Htfd.),
			Salmon Brook Lt. (Granby),
			Sharon,
			South Manchester,
			Still Hill (Glastonbury),
			Suffield,
			Tariffville (Simsbury),
			Thompson, No. 4,
			Thompsonville Fire & Sewer,
			Unionville,
			West Shore (Orange),
			Wolcott.

During the four-year period there has been an increase of 56.38% in the amount raised by taxation. In 1916 the municipalities of the state raised twenty-one million, nine hundred forty-one thousand, three hundred and fifty-two dollars, and in 1920 thirty-four million, three hundred and twelve thousand, five hundred and four dollars.

Since 1884 there has been an increase of 706 per cent in the amount raised by the municipalities of the state by taxation. Somewhat over 6% of the current expenditures of the municipalities for 1920 was for interest. The amount expended was \$3,187,769, an increase of \$939,371, or 41.78%, as compared with the 1916 report.

In 1920 the municipalities of the state received \$1,434,909.47 in taxes because of share holdings in stock of banks, trust, insurance and investment companies. This is an increase of \$215,858.15.

Since 1916 the towns have been in receipt of a new tax—the estate penalty tax. In 1920 the towns received \$112,932.90 from the estates of decedents who during their lifetime neglected to pay taxes on taxable property. This tax is collected by the state, and 80% of the amount collected is returned to the towns.

There was a decrease of \$84,550 in the receipts for roads during 1920 as compared with 1916. The major portion of receipts by municipalities for roads is from the state. During 1920 there was less road building than usual. There was an increase of \$4,862,068, or 92.55%, as compared with the previous public statement in the amount spent for roads.

As compared with 1916, the amounts paid out this past year by the municipalities showed an increase of \$406,200 for paupers, or 27.57%; \$5,185,496, or 61.89%, for schools; \$1,100,838, or 88.16%, for police; \$1,113,429, or 76.50%, for fire department.

The municipalities paid out in taxes during the past year \$2,802,992, an increase of \$764,511 over 1916.

There was an increase of \$251,432 in the amount paid for salaries.

The percentage of net indebtedness of all the municipalities in the state to the grand list as returned by the towns in 1920 is 4.42%. If from the net indebtedness is subtracted the water indebtedness, this percentage is decreased to 3.67%.

The grand total of expenditures for the municipalities of the

state during this past year represents 3.89% of the grand list as returned by the various towns.

The average tax rate of all the municipalities in the state is 19.7 mills, as obtained by dividing the total receipts from local taxation during 1920 by the grand list as returned by the towns. Four years ago such tax rate was 18.6 mills.

In 1916 the per capita net indebtedness of all the municipalities was \$41.39; in 1920 such amount was \$53.19. This represents an increase of \$11.80 in the per capita net indebtedness during the four-year period.

The per capita local tax of all municipalities is \$23.71, an increase of \$7.23 per capita since 1916.

The per capita expenditures of all municipalities is \$46.87, or an increase of \$15.53 over the per capita expenditures in 1916.

PLAN OF THE REPORT

The make-up of this report is similar to those formerly published by this department. This year's tables may, thus, be easily compared with those in previous reports.

Municipalities have been listed in the majority of the tables in order of population by the 1920 census. It will be found that this arrangement is of great advantage in readily comparing towns of approximately the same population.

The municipalities of the state have not until the last decade concerned themselves with expenses. For years it was the usual procedure of a municipality to spend more than the amount taken in by taxes and from other sources. The excess of expenditures over the receipts was met by a temporary loan and gradually these temporary loans were funded by a bond issue. Recently, however, the municipalities, because of the ever-increasing burden of taxation, have awakened to the needs of checking expenditures. In 1915 the General Assembly passed a law limiting the amount of bonded indebtedness which a municipality might incur. That limit was placed at 5% of the municipality's grand list. This limitation was broadened by the 1919 General Assembly. That Assembly allowed a municipality to include in its grand list the assessed value of all shares of capital stock of national banks, trust, insurance and investment companies, the taxes on which shares of stock are remitted annually to

the municipality by the state. The 1919 Assembly also provided that in the 5% limitation, bonds issued for the supply of water shall not be included or considered.

Table No. 4 shows the municipalities arranged in order of percentage of net indebtedness to the last grand list of the towns, with the addition to such grand list of the assessed valuation of stock of national banks, trust, insurance and investment companies. One column of figures shows the percentages inclusive of water debt, and in another column is shown the percentages exclusive of the water debt. The indebtedness of many of the cities having the highest percentages is made up largely of water debt. It will be noted that several of the municipalities are at the present time over the 5% limitation.

TABLES

The report consists of eight tables; the same number as that given in the report for 1916. The first table shows by counties the indebtedness, receipts and expenditures of the towns, cities, boroughs and fire districts, as well as the grand totals of indebtedness, receipts and expenditures for the entire state.

Table No. 2 shows in detail the purposes of creation of indebtedness of the counties, cities, boroughs and towns arranged in order of population as shown by the 1920 census. The fire districts are arranged in order of estimated population. This table shows the average interest on indebtedness.

Table No. 3 shows the receipts and expenditures of all the municipalities of the state arranged in order of population.

The next table shows the percentage of net indebtedness to the grand list after the grand list has been increased by the market value of the shares of stock of banks, trust, insurance and investment companies attributable to each municipality. This table shows the various municipalities arranged in order of percentage.

The assessed valuation of stock has been obtained by subtracting from the market value of the stock the assessed valuation of the corporation's real estate.

The other tables give comparative figures for the past year of the municipalities and also comparisons with former years beginning with 1888.

Table No. 7 presents in graphic form the increase in grand

list, indebtedness, amount raised by taxation, expenditures for roads, schools and interest, compared with increase in population from 1880 to 1920.

Respectfully submitted,

A handwritten signature in cursive script, reading "Thos. H. Blodgett." The signature is written in dark ink and is positioned above the title "Tax Commissioner."

Tax Commissioner.

MUNICIPAL TOTALS BY COUNTIES

As of close of fiscal years ended next prior to October 11, 1920

TABLE No. 1

Details of the gross indebtedness, sinking fund, net indebtedness, receipts and expenditures of the different cities, boroughs, fire districts and towns, arranged by counties, with totals.

Hartford County					
TOWNS	Gross indebtedness	Sinking fund	Net indebtedness	Total receipts	Total expenditures
Avon				\$44,681.23	\$41,255.78
Berlin	\$70,000.00		\$70,000.00	126,490.82	125,538.11
Bloomfield	92,539.49		92,539.49	87,145.92	97,456.54
Bristol, a	1,084,537.20	\$115,065.18	969,472.02	914,965.36	919,466.51
Burlington	15,111.58		15,111.58	29,069.51	26,817.40
Canton	64,596.86	5,396.07	59,200.79	99,009.11	90,086.95
East Granby	23,500.00		23,500.00	35,525.41	30,912.29
East Hartford	428,745.38	17,588.50	411,156.88	438,342.76	436,613.79
East Windsor	105,266.97		105,266.97	147,595.59	135,789.26
Enfield	244,884.56	10,066.67	234,817.89	312,884.11	308,443.81
Farmington	112,000.00		112,000.00	98,257.84	100,065.90
Glastonbury	162,000.88	18,548.95	143,451.93	206,931.23	202,503.55
Granby	23,651.42		23,651.42	37,951.47	42,309.29
Hartford, a	11,808,481.00	1,872,433.00	9,936,048.00	6,961,100.00	6,874,736.39
Hartland				13,959.61	11,410.26
Manchester	130,000.00		130,000.00	708,452.11	719,557.34
Marlborough	7,324.79		7,324.79	6,244.02	6,377.77
New Britain, a	3,712,700.00	419,316.56	3,293,383.44	1,959,621.17	1,833,250.44
Newington	101,385.00	3,080.68	98,304.32	51,923.11	50,743.05
Plainville	58,000.00		58,000.00	109,198.20	110,088.48
Rocky Hill	68,518.22		68,518.22	34,016.61	34,145.09
Simsbury				104,363.00	110,933.43
Southington	306,000.00	24,542.07	281,457.93	276,015.55	273,050.67
South Windsor	52,559.21		52,559.21	182,508.84	174,452.45
Suffield				194,354.22	200,810.42
West Hartford	798,170.00	43,602.19	749,567.81	1,166,836.57	1,157,506.19
Wethersfield	99,377.04		99,377.04	133,443.34	136,951.41
Windsor	160,000.00	22,591.58	137,408.42	263,122.15	255,531.04
Windsor Locks	201,000.00	45,829.28	155,170.72	150,845.09	140,607.11
Totals	\$19,925,349.60	\$2,598,060.73	\$17,327,288.87	\$14,894,853.75	\$14,647,408.72

a Town and city governments consolidated.

CITIES AND BOROUGHS

East Hartford, b	\$772,000.00	\$116,264.61	\$655,735.39	\$535,072.94	\$313,850.70
Farmington	5,500.00	2,613.27	2,886.73	11,200.28	11,141.07
Southington	128,840.00	7,814.02	121,025.98	54,395.49	35,461.17
Totals	\$906,340.00	\$126,191.90	\$780,148.10	\$600,668.71	\$360,452.94

b Fire district has all the powers of a borough.

FIRE DISTRICTS

East Hartford:					
Meadow	\$3,500.00		\$3,500.00	\$10,795.27	\$10,964.60
East Windsor:					
Warehouse Pt.	1,400.00		1,400.00	1,440.29	1,805.70
Enfield:					
Enfield No. 1.	200.00		200.00	50.00	81.58
Hazardville				1,120.73	159.06
No. Thompsonville	500.00		500.00	266.69	166.40
Thompsonville					
Fire and Sewer				13,486.92	13,406.29
Farmington:					
Unionville	4,500.00		4,500.00	5,074.10	5,142.83
Glastonbury:					
Addison					
Center	500.00		500.00	750.00	643.92
Glastonbury	2,400.00		2,400.00	2,779.43	2,804.72
Hebron					
Naubac				841.23	850.19
So. Glastonbury	300.00		300.00	300.00	332.00
Still Hill					
Granby:					
Salmon Brook					
Lighting				1,076.95	875.38
Manchester:					
So. Manchester				48,591.02	40,205.97
Simsbury:					
Tariffville				711.47	611.29
Suffield				131.16	2,398.10
West Hartford:					
Center				10,520.43	7,732.01
East Side				22,192.29	26,485.02
South	3,000.00		3,000.00	9,059.68	3,464.23
Wethersfield:					
Wethersfield	22,000.00	\$1,035.65	20,964.35	9,166.30	9,313.94
Wolcott Hill	45,000.00		45,000.00	7,134.80	5,162.51
Windsor:					
Wilson	10,629.23		10,629.23	6,343.12	6,663.62
Windsor	182,500.00		182,500.00	22,368.90	22,517.56
Total	\$276,429.23	\$1,035.65	\$275,393.58	\$174,200.78	\$161,786.92

MUNICIPAL TOTALS BY COUNTIES

As of close of fiscal years ended next prior to October 11, 1920

TOWNS	New Haven County				
	Gross indebtedness	Sinking fund	Net indebtedness	Total receipts	Total expenditures
Ansonia, a	\$447,000.00	\$171,935.89	\$275,064.11	\$440,209.86	\$431,480.40
Beacon Falls	10,871.33	.....	10,871.33	38,368.66	34,050.30
Bethany	7,701.32	.....	7,701.32	12,203.61	13,795.08
Branford	42,918.57	.....	42,918.57	327,218.96	327,791.34
Cheshire	53,500.00	.....	53,500.00	74,881.64	69,933.53
Derby, a	270,000.00	21,529.17	248,470.83	228,795.52	213,813.81
East Haven	79,377.20	5,717.97	73,659.23	94,423.42	94,661.39
Guilford	55,850.00	.....	55,850.00	67,570.45	61,619.03
Hamden	245,121.34	26,666.68	218,454.66	508,077.75	516,327.11
Madison	43,516.13	.....	43,516.13	80,677.13	58,745.51
Meriden	552,248.03	.....	552,248.03	793,197.77	845,035.29
Middlebury	23,100.00	.....	23,100.00	19,519.98	19,479.05
Milford	551,200.00	.....	551,200.00	341,214.69	406,449.59
Naugatuck, b	200,033.71	.....	200,033.71	411,905.46	409,420.29
New Haven, a	6,527,500.00	182,554.89	6,344,945.11	5,735,951.52	5,805,633.17
No. Branford	33,000.00	2,000.00	31,000.00	64,516.22	56,291.69
No. Haven	81,417.20	24,397.15	57,020.05	67,568.13	81,635.75
Orange	912,000.00	28,529.24	883,470.76	356,523.01	399,346.19
Oxford	35,745.00	.....	35,745.00	22,400.36	22,878.82
Prospect	1,647.00	.....	1,647.00	15,297.34	13,312.42
Seymour	142,026.16	2,604.89	139,421.27	160,941.92	193,716.45
Southbury	42,898.91	.....	42,898.91	37,135.35	36,322.16
Wallingford	612,050.00	11,372.08	600,677.92	342,688.98	309,917.80
Waterbury, a	8,032,840.00	175,000.00	7,857,840.00	5,599,707.75	5,890,697.12
Wolcott	5,000.00	.....	5,000.00	19,005.46	15,423.68
Woodbridge	37,493.86	.....	37,493.86	89,764.09	79,258.34
Totals	\$19,046,055.76	\$652,307.96	\$18,393,747.80	\$15,924,764.08	\$16,397,035.91

CITIES AND BOROUGHS					
Meriden	\$470,000.00	.....	\$470,000.00	\$707,450.19	\$682,395.03
Branford	.....	.....	.....	4,511.20	4,780.73
Guilford	3,600.00	.....	3,600.00	10,239.44	10,262.39
Wallingford	452,000.00	\$68,897.85	383,102.15	224,609.08	224,035.58
Woodmont	.....	.....	.....	12,688.96	12,817.35
Totals	\$925,600.00	\$68,897.85	\$856,702.15	\$909,498.87	\$934,311.10

FIRE DISTRICTS

Orange:					
Allington	.....	.....	.....	\$1,805.46	\$1,930.42
West Shore	.....	.....	.....	6,030.65	4,416.61
Totals	.....	.....	.....	\$7,836.11	\$6,347.03

a Town and city governments consolidated.
 b Town and borough governments consolidated.

New London County					
TOWNS	Gross indebtedness	Sinking fund	Net indebtedness	Total receipts	Total expenditures
Borrah	\$16,200.00	.....	\$16,200.00	\$16,375.17	\$18,129.78
Colchester	28,000.00	.....	28,000.00	52,182.18	49,013.74
East Lyme	78,500.00	.....	78,500.00	46,320.62	61,305.24
Franklin	10,129.75	.....	10,129.75	12,758.97	12,251.50
Griswold	111,000.00	.....	111,000.00	208,910.62	207,820.85
Groton	248,339.48	.....	248,339.48	226,177.73	228,342.98
Lebanon	38,279.07	.....	38,279.07	48,314.73	44,950.37
Ledyard	9,308.00	.....	9,308.00	19,695.60	18,079.71
Lisbon	43,865.81	\$12,108.03	31,757.78	17,917.81	16,198.13
Lyme	48,615.58	1,116.98	42,498.60	11,698.82	15,375.15
Montville	54,100.00	.....	54,100.00	102,992.91	98,328.91
New London, a	2,189,000.00	48,566.46	2,140,433.54	1,893,488.05	1,757,499.26
No. Stonington	41,082.51	.....	41,082.51	21,380.68	20,196.01
Norwich	209,804.52	398.57	209,405.95	532,202.94	565,286.86
Old Lyme	23,050.00	.....	23,050.00	41,456.16	40,714.71
Preston	53,637.21	.....	53,637.21	27,006.09	26,574.00
Salem	11,863.04	.....	11,863.04	11,556.80	8,870.85
Sprague	150,000.00	8,359.46	141,640.54	63,670.39	62,937.97
Stonington	331,784.91	.....	331,784.91	209,992.61	218,759.56
Voluntown	18,349.13	1,198.90	17,150.23	17,294.91	15,759.87
Waterford	204,232.87	.....	204,232.87	89,385.38	83,802.54
Totals	\$3,914,141.88	\$71,743.40	\$3,842,398.48	\$3,670,729.27	\$3,570,097.99

a Town and city governments consolidated.

MUNICIPAL TOTALS BY COUNTIES

As of close of fiscal years ended next prior to October 11, 1920

New London County (Continued)

CITIES AND BOROUGHES					
Norwich	\$1,801,100.00	\$55,265.18	\$1,745,834.82	\$1,018,530.36	\$1,018,872.86
Colchester				1,877.47	1,644.74
Groton	397,000.00		397,000.00	14,274.10	22,558.27
Griswold:					
Jewett City ..	75,275.00	2,510.66	72,764.34	21,938.59	21,587.05
Stonington ...	18,500.00		18,500.00	11,785.75	11,941.51

Totals	\$2,291,875.00	\$57,775.84	\$2,234,099.16	\$1,068,406.27	\$1,074,604.43
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FIRE DISTRICTS

Groton and Stonington:					
Mystic	\$17,000.00		\$17,000.00	\$12,153.63	\$10,054.76
Stonington:					
Pawcatuck ..	7,637.50		7,637.50	11,857.98	11,876.88
Totals	\$24,637.50		\$24,637.50	\$23,511.61	\$21,931.64

Fairfield County

TOWNS	Gross indebtedness	Sinking fund	Net indebtedness	Total receipts	Total expenditures
Bethel	\$121,792.93	\$6,363.27	\$115,429.66	\$143,567.75	\$139,030.78
Bridgeport, a ..	11,336,000.00	894,583.95	10,941,416.05	8,341,247.51	8,694,464.28
Brookfield	11,600.00		11,600.00	21,751.91	28,075.37
Danbury	485,500.00	10,000.00	475,500.00	635,635.97	635,533.50
Darien	206,250.00		206,250.00	211,142.92	246,397.83
Easton	7,923.75	5,600.00	2,323.75	19,325.76	19,987.55
Fairfield	389,500.00	22,217.78	367,282.22	390,171.94	389,179.97
Greenwich	1,492,200.00		1,492,200.00	2,271,186.72	2,478,278.57
Monroe	21,210.29		21,210.29	22,930.12	21,232.25
New Canaan ..	240,000.00	11,947.33	228,052.67	154,889.07	150,083.46
New Fairfield ..	8,500.00		8,500.00	17,273.88	15,435.24
Newtown	46,000.00		46,000.00	74,490.28	68,081.36
Norwalk, a	2,356,500.00	301,075.13	2,055,424.87	832,134.24	918,570.03
Redding	28,238.79	2,000.00	26,238.79	35,080.44	34,137.07
Ridgefield	105,760.16	45,856.93	60,403.23	109,569.47	108,023.44
Shelton, a	551,000.00	54,644.68	496,355.32	373,904.99	209,286.47
Sherman	13,388.28		13,388.28	13,287.23	12,408.10
Stamford	1,746,000.00	389,479.57	1,356,520.43	1,730,782.67	1,724,219.34
Stratford	1,134,859.31	115.96	1,134,743.35	1,129,432.34	893,718.62
Trumbull	112,639.88		112,639.88	152,375.86	123,850.36
Weston	16,543.00		16,543.00	9,002.62	12,448.99
Westport	347,592.61		347,592.61	221,689.51	209,977.28
Wilton	25,000.00	3,067.45	21,932.55	46,378.08	47,061.83
Totals	\$20,803,997.00	\$1,246,452.05	\$19,557,544.95	\$17,008,131.28	\$17,179,476.19

CITIES AND BOROUGHES

Danbury	\$934,000.00	\$82,852.88	\$851,147.12	\$709,836.72	\$611,748.51
Stamford	1,086,000.00	308,194.28	777,805.72	1,180,997.18	1,161,637.88
Greenwich	487,000.00		487,000.00	257,933.58	134,740.93
New Canaan ..	91,000.00	6,033.63	84,966.37	37,490.00	36,968.20
Newtown				2,228.99	2,091.12
Ridgefield	72,000.00	24,989.08	47,010.92	40,652.67	39,634.08

Totals	\$2,670,000.00	\$422,069.87	\$2,247,930.13	\$2,229,139.14	\$1,986,820.72
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FIRE DISTRICTS

Westport	\$26,000.00		\$26,000.00	\$5,634.44	\$4,996.15
Totals	\$26,000.00		\$26,000.00	\$5,634.44	\$4,996.15

a Town and city governments consolidated.

MUNICIPAL TOTALS BY COUNTIES

As of close of fiscal years ended next prior to October 11, 1920

Windham County					
TOWNS	Gross indebtedness	Sinking fund	Net indebtedness	Total receipts	Total expenditures
Ashford	\$10,726.06	.....	\$10,726.06	\$16,117.46	\$16,500.19
Brooklyn	56,877.27	\$5,791.72	50,585.55	41,497.26	40,338.52
Canterbury	10,233.00	.....	10,233.00	15,481.29	11,780.31
Chaplin	5,722.66	.....	5,722.66	7,652.09	8,584.10
Eastford	19,258.00	.....	19,258.00	11,357.47	11,472.26
Hampton	2,828.28	.....	2,828.28	13,404.92	12,616.55
Killingly	259,297.05	.....	259,297.05	219,038.55	211,149.62
Plainfield	78,337.45	5,924.47	72,412.98	136,444.28	134,926.90
Pomfret	9,607.19	.....	9,607.19	46,433.56	55,218.85
Putnam	218,550.34	7,830.00	210,720.34	174,152.70	170,377.38
Scotland	3,706.47	.....	3,706.47	12,086.44	12,664.50
Sterling	19,000.00	.....	19,000.00	24,784.38	26,081.54
Thompson	5,573.25	.....	5,573.25	92,377.37	96,241.28
Windham	605,035.11	67,562.10	537,473.01	291,443.84	274,649.27
Woodstock	15,458.85	.....	15,458.85	55,849.64	51,631.39
Totals	\$1,310,710.98	\$87,108.29	\$1,232,602.69	\$1,157,621.25	\$1,134,232.96
CITIES AND BOROUGHES					
Putnam	\$497,500.00	\$37,220.00	\$460,280.00	\$131,142.28	\$144,824.91
Willimantic	314,000.00	85,473.70	228,526.30	218,040.85	190,276.50
Danielson	61,100.00	.....	61,100.00	38,076.77	35,324.90
Totals	\$872,600.00	\$122,693.70	\$749,906.30	\$382,259.90	\$370,426.31
FIRE DISTRICTS					
Brooklyn	\$1,850.00	.....	\$1,850.00	\$2,222.62	\$2,165.26
Thompson, No. 4 .....	.....	.....	.....	9.00	5.25
Totals	\$1,850.00	.....	\$1,850.00	\$2,231.62	\$2,170.51

Litchfield County					
TOWNS	Gross indebtedness	Sinking fund	Net indebtedness	Total receipts	Total expenditures
Barkhamsted ..	\$29,000.00	.....	\$29,000.00	\$24,677.59	\$22,928.66
Bethlehem	15,831.92	.....	15,831.92	15,847.05	15,743.53
Bridgewater	15,400.00	.....	15,400.00	12,267.93	10,263.90
Canaan	13,000.17	.....	13,000.17	16,786.79	18,042.46
Colebrook	19,335.61	.....	19,335.61	18,105.20	19,545.55
Cornwall	21,149.14	.....	21,149.14	26,777.70	26,775.45
Goshen	4,000.00	.....	4,000.00	25,827.78	24,297.48
Harwinton	64,633.60	.....	64,633.60	45,099.26	47,910.62
Kent	30,200.00	.....	30,200.00	41,751.77	35,508.12
Litchfield	68,000.00	.....	68,000.00	131,784.09	126,212.06
Morris	2,217.00	.....	2,217.00	22,855.30	22,162.97
New Hartford ..	57,000.00	\$2,954.39	54,045.61	52,559.76	50,853.01
New Milford	129,500.00	.....	129,500.00	146,845.19	146,985.96
Norfolk	68,000.00	3,778.41	64,221.59	108,123.28	100,646.07
North Canaan ..	59,564.60	.....	59,564.60	46,472.21	49,907.70
Plymouth	128,775.53	22,092.29	106,683.24	167,597.50	167,647.06
Roxbury	16,801.67	.....	16,801.67	21,410.20	20,258.61
Salisbury	15,500.00	.....	15,500.00	70,570.51	77,896.11
Sharon	13,869.27	.....	13,869.27	49,506.21	47,296.35
Thomaston	57,650.52	.....	57,650.52	123,084.18	116,926.90
Torrington	908,252.97	36,000.00	872,252.97	847,601.92	788,205.30
Warren	5,700.00	.....	5,700.00	10,052.59	9,279.05
Washington	47,963.00	.....	47,963.00	74,639.18	72,260.08
Watertown	93,152.50	.....	93,152.50	204,935.56	229,734.61
Winchester	338,550.84	35,112.57	303,438.27	312,280.05	301,519.20
Woodbury	48,182.07	.....	48,182.07	57,275.22	38,890.05
Totals	\$2,271,230.41	\$99,937.66	\$2,171,292.75	\$2,674,734.02	\$2,582,701.17
CITIES AND BOROUGHES					
Bantam .....	.....	.....	.....	\$1,368.26	\$918.77
Litchfield	\$24,500.00	.....	\$24,500.00	8,902.58	7,894.83
Torrington	348,089.41	\$18,562.13	329,527.28	409,054.31	435,005.60
Totals	\$372,589.41	\$18,562.13	\$354,027.28	\$419,325.15	\$443,819.22

MUNICIPAL TOTALS BY COUNTIES

As of close of fiscal years ended next prior to October 11, 1920

Litchfield County (Continued)

FIRE DISTRICTS					
Canaan:					
Falls Village			\$913.65	\$808.48	
Kent			614.18	617.68	
New Hartford:					
Pine Meadow Village			854.71	914.97	
Village	\$500.00	\$500.00	2,152.12	2,228.28	
New Milford ..	1,200.00	1,200.00	8,517.11	8,457.05	
North Canaan:					
Canaan	10,700.00	10,700.00	2,844.82	2,700.84	
Salisbury:					
Lakeville ...	19,750.00	19,750.00	4,550.69	4,500.90	
Sharon			1,445.62	1,550.48	
Watertown:					
Oakville			1,850.98	1,041.70	
Watertown ...	96,850.00	96,850.00	13,271.53	10,859.02	
Totals	\$129,000.00	\$129,000.00	\$37,015.41	\$33,874.25	

Middlesex County

TOWNS	Gross indebtedness	Sinking fund	Net indebtedness	Total receipts	Total expenditures
Chester	\$15,750.00		\$15,750.00	\$51,931.02	\$51,900.24
Clinton	23,356.86		23,356.86	26,504.45	28,237.26
Cromwell	20,000.00		20,000.00	59,598.76	61,728.26
Durham	17,000.00		17,000.00	31,277.61	29,613.36
East Haddam ..	32,062.58		32,062.58	53,082.84	58,439.80
East Hampton ..	82,350.00	\$2,114.16	80,235.84	93,105.80	95,755.86
Essex	29,460.83		29,460.83	58,542.39	56,570.46
Haddam	6,000.00		6,000.00	53,487.94	54,220.02
Killingworth ..	4,716.66	623.49	4,093.17	12,606.83	13,158.51
Middlefield ..	2,508.24		2,508.24	16,320.81	15,483.35
Middletown ..	835,000.00	66,849.04	768,650.96	440,087.22	436,879.49
Old Saybrook ..	44,538.86		44,538.86	73,000.04	70,770.57
Portland	187,600.00		187,600.00	105,938.49	108,697.10
Saybrook	66,500.00	7,887.36	58,612.64	118,110.63	112,184.95
Westbrook	20,175.00		20,175.00	29,701.94	24,986.55
Totals	\$1,387,019.03	\$76,974.05	\$1,310,044.98	\$1,223,276.77	\$1,218,625.78

CITIES AND BOROUGHS					
Middletown ...	\$456,000.00	\$177,254.71	\$278,745.29	\$199,684.96	\$195,659.87
Fenwick	7,850.00		7,850.00	9,037.76	8,874.17
Totals	\$463,850.00	\$177,254.71	\$286,595.29	\$208,722.72	\$204,534.04

FIRE DISTRICTS					
East Haddam:					
East Haddam			\$633.85	\$480.98	
Moodus			925.65	853.15	
East Hampton:					
East Hampton ..			3,315.61	2,430.09	
Haddam:					
Haddam Center			429.28	311.16	
Higginnum ..			1,513.94	1,314.16	
Totals			\$6,818.33	\$5,380.54	

Tolland County

TOWNS	Gross indebtedness	Sinking fund	Net indebtedness	Total receipts	Total expenditures
Andover	\$7,983.23		\$7,983.23	\$10,743.41	\$6,413.90
Bolton	3,500.00		3,500.00	12,258.60	10,123.09
Columbia	14,788.88		14,788.88	23,669.75	23,281.30
Coventry	19,246.77		19,246.77	41,029.31	41,661.16
Ellington	45,500.00	\$8,411.97	37,088.03	88,177.26	83,792.34
Hebron	33,267.71	4,500.00	28,767.71	22,675.40	21,985.36
Mansfield	64,884.34		64,884.34	63,356.26	64,341.06
Somers	32,682.40		32,682.40	46,139.32	40,750.09
Stafford	68,319.95		68,319.95	144,757.98	146,230.05
Tolland	33,700.00		33,700.00	32,908.22	30,576.57
Union	4,600.00		4,600.00	14,547.56	15,819.92
Vernon	299,800.00	72,926.11	226,873.89	265,736.33	268,567.41
Willington ...	3,351.67		3,351.67	21,549.57	25,676.35
Totals	\$631,624.95	\$85,838.08	\$545,786.87	\$787,549.97	\$779,118.60

CITIES AND BOROUGHS					
Rockville	\$189,000.00	\$42,226.14	\$146,773.86	\$170,704.81	\$172,096.93
Stafford Springs	15,000.00		15,000.00	26,722.23	23,674.36
Totals	\$204,000.00	\$42,226.14	\$161,773.86	\$197,427.04	\$195,771.29

SUMMARY OF MUNICIPAL STATISTICS BY COUNTIES

COUNTIES	Gross indebtedness	Sinking fund	Net indebtedness	Total receipts	Total expenditures
Hartford:					
Towns	\$19,925,849.60	\$2,598,060.78	\$17,327,288.87	\$14,894,853.75	\$14,647,406.72
Cities and boroughs	906,840.00	126,191.90	780,148.10	600,668.71	360,482.94
Fire districts	276,429.28	1,035.65	275,893.58	174,200.78	161,786.92
Total for county.	\$21,108,118.88	\$2,725,288.28	\$18,382,830.55	\$15,669,743.24	\$15,169,648.58
New Haven:					
Towns	\$19,046,055.76	\$652,807.96	\$18,398,747.80	\$15,924,764.98	\$16,397,035.91
Cities and boroughs	925,600.00	68,897.85	856,702.15	959,498.87	934,311.10
Fire districts .....	.....	.....	.....	7,836.11	6,347.03
Total for county.	\$19,971,655.76	\$721,205.81	\$19,250,449.95	\$16,892,099.98	\$17,337,694.04
New London:					
Towns	\$3,914,141.88	\$71,743.40	\$3,842,398.48	\$3,670,729.27	\$3,570,097.99
Cities and boroughs	2,291,875.00	57,775.84	2,234,099.16	1,068,406.27	1,074,604.43
Fire districts	24,637.50	.....	24,637.50	23,511.61	21,931.64
Total for county.	\$6,230,654.38	\$129,519.24	\$6,101,135.14	\$4,762,647.15	\$4,666,634.06
Fairfield:					
Towns	\$20,803,997.00	\$1,246,452.05	\$19,557,544.95	\$17,008,131.28	\$17,179,476.19
Cities and boroughs	2,670,000.00	422,069.87	2,247,930.18	2,229,139.14	1,986,820.72
Fire districts	26,000.00	.....	26,000.00	5,634.44	4,996.15
Total for county.	\$23,499,997.00	\$1,668,521.92	\$21,831,475.08	\$19,242,904.86	\$19,171,293.06
Windham:					
Towns	\$1,819,710.98	\$87,108.29	\$1,232,602.69	\$1,157,621.25	\$1,134,232.96
Cities and boroughs	872,600.00	122,693.70	749,906.30	382,259.90	370,426.31
Fire districts	1,850.00	.....	1,850.00	2,281.62	2,170.51
Total for county.	\$2,194,160.98	\$209,801.99	\$1,984,358.99	\$1,542,112.77	\$1,506,829.78
Litchfield:					
Towns	\$2,271,230.41	\$99,937.66	\$2,171,292.75	\$2,674,734.02	\$2,582,701.17
Cities and boroughs	872,589.41	18,562.13	854,027.28	419,325.15	443,819.22
Fire districts	129,000.00	.....	129,000.00	37,015.41	33,674.25
Total for county.	\$2,772,819.82	\$118,499.79	\$2,654,320.03	\$3,131,074.58	\$3,060,194.64
Middlesex:					
Towns	\$1,387,019.03	\$76,974.05	\$1,310,044.98	\$1,223,276.77	\$1,218,625.78
Cities and boroughs	463,850.00	177,254.71	286,595.29	208,722.72	204,534.04
Fire districts .....	.....	.....	.....	6,818.33	5,389.54
Total for county.	\$1,850,869.03	\$254,228.76	\$1,596,640.27	\$1,438,817.82	\$1,428,549.36
Tolland:					
Towns	\$631,624.95	\$85,838.08	\$545,786.87	\$787,549.97	\$779,113.60
Cities and boroughs	\$204,000.00	42,226.14	161,773.86	197,427.04	195,771.29
Total for county.	\$835,624.95	\$128,064.22	\$707,560.73	\$984,977.01	\$974,889.89
Total of all towns, boroughs, and fire districts:					
Towns	\$69,299,129.61	\$4,918,422.22	\$64,380,707.39	\$57,341,661.29	\$57,508,697.32
Cities and boroughs	8,706,854.41	1,035,672.14	7,671,182.27	6,065,447.80	5,570,740.65
Fire districts	457,916.73	1,035.85	456,881.08	257,248.30	236,296.04
Grand total	\$78,463,900.75	\$5,955,130.01	\$72,508,770.74	\$63,664,357.39	\$63,315,733.41

TABLE No. 2

Detailed statement of indebtedness of counties, cities, boroughs, towns, and fire districts, giving funded and floating indebtedness, date of maturity, interest rates, and the principal purposes for which the indebtedness was incurred; counties, cities, boroughs, and towns, arranged in order of population—1920 census.

INDEBTEDNESS OF COUNTIES

As of close of fiscal years ended next prior to October 11, 1920

	New Haven	Hartford	Fairfield	New London
<i>Population 1920 census:</i>	415,214	336,027	320,936	104,611
Funded indebtedness:				
Water				
Miscellaneous			\$375,000.00	.....
Floating indebtedness		\$450,000.00	.....	\$72,000.00
Gross indebtedness		\$450,000.00	\$375,000.00	\$72,000.00
Purposes of creation of indebtedness:				
Current expenses				\$22,000.00
Fire and police				
Schools				
Other public buildings		\$200,000.00	\$375,000.00	50,000.00
Highways and bridges		250,000.00	.....	.....
Parks				
Railroads				
Sewers				
Town deposit and trust funds				
War				
Water				
Other miscellaneous indebtedness				
Gross indebtedness		\$450,000.00	\$375,000.00	\$72,000.00
Less sinking fund				
Net indebtedness		\$450,000.00	\$375,000.00	\$72,000.00
Date of maturity of funded indebtedness			1944	.....
Average interest on indebtedness		5%	4½%	5%
Average interest on sinking fund				

	Litchfield	Windham	Middlesex	Tolland
<i>Population 1920 census:</i>	76,262	52,815	47,550	27,216
Funded indebtedness:				
Water				
Miscellaneous				
Floating indebtedness		\$25,000.00	.....	.....
Gross indebtedness		\$25,000.00	.....	.....
Purposes of creation of indebtedness:				
Current expenses		\$25,000.00	.....	.....
Fire and police				
Schools				
Other public buildings				
Highways and bridges				
Parks				
Railroads				
Sewers				
Town deposit and trust funds				
War				
Water				
Other miscellaneous indebtedness				
Gross indebtedness		\$25,000.00	.....	.....
Less sinking fund				
Net indebtedness		\$25,000.00	.....	.....
Date of maturity of funded indebtedness				
Average interest on indebtedness		6%	.....	.....
Average interest on sinking fund				

INDEBTEDNESS OF CITIES

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

<i>Population 1920 census:</i>	New Haven a 182,537	Bridgeport a 143,555	Hartford a 138,036	Waterbury a 91,715
Funded indebtedness:				
Water			\$3,800,000.00	\$2,210,000.00
Miscellaneous	\$6,252,500.00	\$10,711,000.00	7,680,000.00	5,788,000.00
Floating indebtedness	275,000.00	625,000.00	848,481.00	38,840.00
Gross indebtedness	\$6,527,500.00b	\$11,336,000.00	\$11,808,481.00c	\$8,032,840.00
Purposes of creation of indebtedness:				
Current expenses	\$817,000.00	\$500,000.00	\$950,000.00	.....
Fire and police	95,000.00	284,000.00	.....	\$1,000,000.00
Schools	825,500.00	1,581,000.00	850,000.00	2,681,840.00
Other public buildings	475,000.00	510,000.00	1,865,000.00	200,000.00
Highways and bridges	1,762,000.00	4,338,000.00	3,500,000.00	950,000.00
Parks	600,000.00	762,000.00	800,000.00	195,000.00
Railroads	350,000.00	.....	270,000.00	.....
Sewers	1,355,000.00	1,782,000.00	250,000.00	636,000.00
Town deposit and trust funds .....	.....	.....	23,481.00	.....
War .....	.....	.....	.....	.....
Water .....	.....	.....	3,800,000.00	2,210,000.00
Municipal lighting plant .....	.....	.....	.....	.....
Other miscellaneous indebtedness	458,000.00	1,599,000.00	.....	180,000.00
Gross indebtedness	\$6,527,500.00b	\$11,336,000.00	\$11,808,481.00c	\$8,032,840.00
Less sinking fund	182,554.89	894,583.95	1,872,433.00	175,000.00
Net indebtedness	\$6,344,945.11b	\$10,941,416.05	\$9,936,048.00c	\$7,857,840.00
Date of maturity of funded indebtedness	1948	1920-1965	1955	1920-1993
Average interest on indebtedness	4½%	4½%	4%	4½%
Average interest on sinking fund	4½%	4%	4%	5%

a Town and city governments consolidated.

b Additional school district indebtedness \$245,977.80.

c Additional school district indebtedness \$3,421,195.00.

<i>Population 1920 census:</i>	New Britain a 59,316	Stamford 35,096	Meriden 29,867	Newark a 27,743
Funded indebtedness:				
Water	\$975,000.00	.....	\$230,000.00	\$723,000.00
Miscellaneous	2,554,000.00	\$1,011,000.00	240,000.00	1,606,500.00
Floating indebtedness	183,700.00	75,000.00	.....	27,000.00
Gross indebtedness	\$3,712,700.00	\$1,086,000.00	\$470,000.00	\$2,356,500.00b
Purposes of creation of indebtedness:				
Current expenses	\$141,700.00	\$75,000.00	\$60,000.00	\$124,000.00
Fire and police .....	.....	113,000.00	.....	68,000.00
Schools	987,000.00	.....	.....	100,000.00
Other public buildings	245,000.00	33,000.00	.....	.....
Highways and bridges	181,000.00	186,000.00	180,000.00	450,000.00
Parks	113,000.00	300,000.00	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers	1,015,000.00	319,000.00	.....	110,000.00
Town deposit and trust funds .....	.....	.....	.....	.....
War .....	.....	.....	.....	.....
Water	975,000.00	.....	230,000.00	726,000.00
Municipal lighting plant .....	.....	.....	.....	.....
Other miscellaneous indebtedness	55,000.00	60,000.00	.....	777,500.00
Gross indebtedness	\$3,712,700.00	\$1,086,000.00	\$470,000.00	\$2,356,500.00b
Less sinking fund	419,316.56	308,194.28	.....	301,075.15
Net indebtedness	\$3,293,383.44	\$777,805.72	\$470,000.00	\$2,055,424.87b
Date of maturity of funded indebtedness	1948	1945	1930-1933	1934
Average interest on indebtedness	4%	4%	4½%	4½%
Average interest on sinking fund	4½%	4%	.....	4½%

a Town and city governments consolidated.

b Additional school district indebtedness \$53,986.16

INDEBTEDNESS OF CITIES

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

	New London a	Norwich	Bristol a	Danbury
<i>Population 1920 census:</i>	25,688	22,304	20,620	18,948
Funded indebtedness:				
Water	\$851,000.00	\$610,000.00	\$500,000.00	\$214,000.00
Miscellaneous	1,323,000.00	1,030,000.00	270,000.00	660,000.00
Floating indebtedness	15,000.00	161,100.00	314,537.20	60,000.00
Gross indebtedness	\$2,189,000.00	\$1,801,100.00	\$1,084,537.20b	\$934,000.00
Purposes of creation of indebtedness:				
Current expenses	\$15,000.00	\$139,000.00	\$51,527.19	\$60,000.00
Fire and police		26,000.00		
Schools	707,000.00		113,694.94	
Other public buildings	175,000.00	143,000.00		
Highways and bridges	10,000.00	74,100.00	180,521.61	100,000.00
Parks	125,000.00		8,129.35	
Railroads				
Sewers	54,000.00		20,000.00	345,000.00
Town deposit and trust funds			10,664.11	
War				
Water	851,000.00	610,000.00	500,000.00	214,000.00
Municipal lighting plant		585,000.00		
Other miscellaneous indebtedness				
	252,000.00	224,000.00	250,000.00	215,000.00
Gross indebtedness	\$2,189,000.00	\$1,801,100.00	\$1,084,537.20b	\$934,000.00
Less sinking fund	48,566.46	55,266.18	115,065.18	82,852.88
Net indebtedness	\$2,140,433.54	\$1,745,834.82	\$969,472.02b	\$851,147.12
Date of maturity of funded indebtedness	1920-1950	1939	1940	1950
Average interest on indebtedness	4½%	4½%	4½%	4%
Average interest on sinking fund	4%	4%	4½%	4%

a Town and city governments consolidated.

b Additional school district indebtedness \$276,676.65.

	Ansonia a	Middletown	Willimantic	Derby a
<i>Population 1920 census:</i>	17,643	13,638	12,330	11,238
Funded indebtedness:				
Water		\$200,000.00	\$125,000.00	
Miscellaneous	\$447,000.00	246,000.00	189,000.00	\$270,000.00
Floating indebtedness		10,000.00		
Gross indebtedness	\$447,000.00	\$456,000.00	\$314,000.00	\$270,000.00
Purposes of creation of indebtedness:				
Current expenses	\$75,000.00	\$70,000.00		
Fire and police				
Schools	25,000.00			\$78,000.00
Other public buildings		46,000.00		
Highways and bridges	72,000.00			43,000.00
Parks				
Railroads				
Sewers	75,000.00	88,000.00		
Town deposit and trust funds				
War				
Water		200,000.00	\$125,000.00	
Municipal lighting plant				
Other miscellaneous indebtedness				
	200,000.00	52,000.00	189,000.00	149,000.00
Gross indebtedness	\$447,000.00	\$456,000.00	\$314,000.00	\$270,000.00
Less sinking fund	171,935.89	177,254.71	85,473.70	21,529.17
Net indebtedness	\$275,064.11	\$278,745.29	\$228,526.30	\$248,470.83
Date of maturity of funded indebtedness	1921-1945	1920-1936	1934	1921-1948
Average interest on indebtedness	4%	8½%	4%	4½%
Average interest on sinking fund	4½%	4%	4%	4%

a Town and city governments consolidated.

INDEBTEDNESS OF CITIES

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

<i>Population 1920 census:</i>	Shelton a 9,475	Rockville 7,726	Putnam 7,711
Funded indebtedness:			
Water			\$315,000.00
Miscellaneous	\$520,000.00	\$189,000.00	140,000.00
Floating indebtedness	31,000.00	.....	42,500.00
Gross indebtedness	\$551,000.00	\$189,000.00	\$497,500.00
Purposes of creation of indebtedness:			
Current expenses	\$31,000.00	.....	.....
Fire and police .....	.....	.....	.....
Schools	285,000.00	.....	.....
Other public buildings .....	.....	.....	.....
Highways and bridges	96,000.00	.....	\$40,000.00
Parks .....	.....	.....	.....
Railroads .....	.....	.....	.....
Sewers .....	.....	\$189,000.00	100,000.00
Town deposit and trust funds .....	.....	.....	.....
War .....	.....	.....	.....
Water .....	.....	.....	315,000.00
Municipal lighting plant .....	.....	.....	.....
Other miscellaneous indebtedness	139,000.00	.....	42,500.00
Gross indebtedness	\$551,000.00	\$189,000.00	\$497,500.00
Less sinking fund	54,644.68	42,226.14	37,220.00
Net indebtedness	\$496,355.32	\$146,773.86	\$460,280.00
Date of maturity of funded indebtedness	1944	1935	1920-1944
Average interest on indebtedness	4½%	4%	4½%
Average interest on sinking fund	4%	4½%	4½%

a Town and city governments consolidated.

INDEBTEDNESS OF BOROUGHES

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

	Torrington	Naugatuck a	Wallingford	East Hartford
<i>Population 1920 census:</i>	20,623	15,051	9,648	8,000
Funded indebtedness:				
Water			\$45,000.00	\$300,000.00
Miscellaneous	\$255,000.00	\$120,000.00	320,000.00	.....
Floating indebtedness	93,089.41	80,033.71	87,000.00	472,000.00
Gross indebtedness	\$348,089.41	\$200,033.71	\$452,000.00	\$772,000.00
Purposes of creation of indebtedness:				
Current expenses		\$80,033.71	\$87,000.00	\$52,000.00
Fire and police .....				.....
Schools .....				.....
Other public buildings .....				.....
Highways and bridges			100,000.00	.....
Parks .....				.....
Railroads .....				.....
Sewers	\$255,000.00		42,000.00	.....
Town deposit and trust funds .....				.....
War .....				.....
Water			45,000.00	720,000.00
Other miscellaneous indebtedness	93,089.41	120,000.00	178,000.00	.....
Gross indebtedness	\$348,089.41	\$200,033.71	\$452,000.00	\$772,000.00
Less sinking fund	18,562.13	.....	68,897.85	116,284.61
Net indebtedness	\$329,527.28	\$200,033.71	\$383,102.15	\$655,735.39
Date of maturity of funded indebtedness	1929	1932	1944	1942
Average interest on indebtedness	4½%	4½%	4%	6%
Average interest on sinking fund	4½%	.....	4%	4½%

a Town and borough governments consolidated.

	Greenwich	Southington	Groton	Stafford Springs
<i>Population 1920 census:</i>	5,939	5,085	4,236	3,383
Funded indebtedness:				
Water			\$280,000.00	.....
Miscellaneous	\$487,000.00	\$118,000.00	30,000.00	.....
Floating indebtedness .....	.....	10,840.00	107,000.00	\$15,000.00
Gross indebtedness	\$487,000.00	\$128,840.00	\$397,000.00	\$15,000.00
Purposes of creation of indebtedness:				
Current expenses		\$43,000.00		\$15,000.00
Fire and police .....				.....
Schools	\$190,000.00			.....
Other public buildings .....				.....
Highways and bridges	150,000.00			.....
Parks .....				.....
Railroads .....				.....
Sewers		85,840.00	\$30,000.00	.....
Town deposit and trust funds .....				.....
War .....				.....
Water			367,000.00	.....
Other miscellaneous indebtedness	147,000.00			.....
Gross indebtedness	\$487,000.00	\$128,840.00	\$397,000.00	\$15,000.00
Less sinking fund .....	.....	7,314.02	.....	.....
Net indebtedness	\$487,000.00	\$121,525.98	\$397,000.00	\$15,000.00
Date of maturity of funded indebtedness	1920-1938	1946	1943	.....
Average interest on indebtedness	4½%	4½%	4½%	4½%
Average interest on sinking fund .....	.....	4%	.....	.....

INDEBTEDNESS OF BOROUGHES

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

	Jewett City 3,196	Danielson 3,130	Branford 2,619	Stonington 2,100
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water .....		.....	.....	.....
Miscellaneous	\$45,000.00	.....	.....	.....
Floating indebtedness	30,275.00	\$61,100.00	.....	\$18,500.00
Gross indebtedness	\$75,275.00	\$61,100.00	.....	\$18,500.00
Purposes of creation of indebtedness:				
Current expenses	\$30,275.00	\$61,100.00	.....	\$18,500.00
Fire and police .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Other public buildings .....	.....	.....	.....	.....
Highways and bridges .....	.....	.....	.....	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers .....	.....	.....	.....	.....
Town deposit and trust funds .....	.....	.....	.....	.....
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebted- ness	15,000.00	.....	.....	.....
Electric light plant	30,000.00	.....	.....	.....
Gross indebtedness	\$75,275.00	\$61,100.00	.....	\$18,500.00
Less sinking fund	2,510.66	.....	.....	.....
Net indebtedness	\$72,764.34	\$61,100.00	.....	\$18,500.00
Date of maturity of funded in- debtedness	1935	.....	.....	.....
Average interest on indebtedness	4 1/2 %	5 %	.....	5 %
Average interest on sinking fund	4 %	.....	.....	.....

	New Canaan 1,918	Gulfport 1,612	Bridgefield 1,030	Farmington 1,021
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water .....		.....	.....	.....
Miscellaneous	\$75,000.00	.....	\$72,000.00	.....
Floating indebtedness	16,000.00	\$3,600.00	.....	\$5,500.00
Gross indebtedness	\$91,000.00	\$3,600.00	\$72,000.00	\$5,500.00
Purposes of creation of indebtedness:				
Current expenses	\$16,000.00	\$3,600.00	.....	.....
Fire and police .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Other public buildings .....	.....	.....	.....	.....
Highways and bridges .....	.....	.....	.....	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers	75,000.00	.....	\$72,000.00	\$5,500.00
Town deposit and trust funds .....	.....	.....	.....	.....
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebted- ness .....	.....	.....	.....	.....
Gross indebtedness	\$91,000.00	\$3,600.00	\$72,000.00	\$5,500.00
Less sinking fund	6,033.63	.....	24,989.08	2,613.27
Net indebtedness	\$84,966.37	\$3,600.00	\$47,010.92	\$2,886.73
Date of maturity of funded in- debtedness	1937	.....	1935	.....
Average interest on indebtedness	4 1/2 %	5 %	4 %	4 %
Average interest on sinking fund	4 %	.....	4 %	4 1/2 %

INDEBTEDNESS OF BOROUGHES

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

<i>Population 1920 census:</i>	Colchester 913	Litchfield 707	Bantam 608	Newtown 426
Funded indebtedness:				
Water				
Miscellaneous				
Floating indebtedness		\$24,500.00	.....	.....
Gross indebtedness		\$24,500.00	.....	.....
Purposes of creation of indebtedness:				
Current expenses				
Fire and police		\$10,000.00	.....	.....
Schools				
Other public buildings				
Highways and bridges				
Parks				
Railroads				
Sewers		14,500.00	.....	.....
Town deposit and trust funds				
War				
Water				
Other miscellaneous indebtedness				
Gross indebtedness		\$24,500.00	.....	.....
Less sinking fund				
Net indebtedness		\$24,500.00	.....	.....
Date of maturity of funded indebtedness				
Average interest on indebtedness		4½%	.....	.....
Average interest on sinking fund				

<i>Population 1920 census:</i>	Woodmont 220	Fenwick 120
Funded indebtedness:		
Water		
Miscellaneous		
Floating indebtedness		\$7,850.00
Gross indebtedness		\$7,850.00
Purposes of creation of indebtedness:		
Current expenses		
Fire and police		
Schools		
Other public buildings		
Highways and bridges		\$7,850.00
Parks		
Railroads		
Sewers		
Town deposit and trust funds		
War		
Water		
Other miscellaneous indebtedness		
Gross indebtedness		\$7,850.00
Less sinking fund		
Net indebtedness		\$7,850.00
Date of maturity of funded indebtedness		
Average interest on indebtedness		5%
Average interest on sinking fund		

INDEBTEDNESS OF TOWNS

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

	Stamford	Meriden	Norwich	Danbury
<i>Population 1920 census:</i>	40,067	34,764	29,685	22,325
Funded indebtedness:				
Water				
Miscellaneous	\$1,596,000.00	\$525,000.00	\$117,000.00	\$385,000.00
Floating indebtedness	150,000.00	27,248.03	92,804.52	100,500.00
Gross indebtedness	\$1,746,000.00	\$552,248.03	\$209,804.52	\$485,500.00
Purposes of creation of indebtedness:				
Current expenses	\$364,000.00	\$23,661.88	\$21,000.00	\$185,000.00
Fire and police				
Schools	951,000.00	343,800.00	58,503.11	74,500.00
Other public buildings	225,000.00	167,500.00	117,000.00	
Highways and bridges	171,000.00a			1,000.00
Parks				
Railroads				
Sewers				
Town deposit and trust funds		3,586.15	18,301.41	
War				
Water				
Other miscellaneous indebtedness	35,000.00	13,700.00		225,000.00
Gross indebtedness	\$1,746,000.00	\$552,248.03	\$209,804.52	\$485,500.00
Less sinking fund	389,479.57		398.57	10,000.00
Net indebtedness	\$1,356,520.43	\$552,248.03	\$209,405.95	\$475,500.00
Date of maturity of funded indebtedness	1941	1936-1944	1925	1955
Average interest on indebtedness	4½%	4%	4½%	4½%
Average interest on sinking fund	4%		4%	4%

a Includes schools and bridges \$96,000.

b Additional school district indebtedness \$50,000.00.

	Middletown	Greenwich	Torrington	Manchester
<i>Population 1920 census:</i>	22,129	22,123	22,065	18,370
Funded indebtedness:				
Water				
Miscellaneous	\$684,000.00	\$1,492,200.00	\$470,000.00	\$55,000.00
Floating indebtedness	151,000.00		438,252.97	75,000.00
Gross indebtedness	\$835,000.00	\$1,492,200.00	\$908,252.97	\$130,000.00a
Purposes of creation of indebtedness:				
Current expenses	\$151,000.00		\$108,000.00	\$75,000.00
Fire and police				
Schools		\$571,000.00	792,500.00	
Other public buildings				
Highways and bridges		240,000.00		
Parks		50,000.00		
Railroads	684,000.00			
Sewers		15,200.00		
Town deposit and trust funds			7,752.97	
War				
Water				
Other miscellaneous indebtedness		616,000.00		55,000.00
Gross indebtedness	\$835,000.00	\$1,492,200.00	\$908,252.97	\$130,000.00a
Less sinking fund	66,349.04		36,000.00	
Net indebtedness	\$768,650.96	\$1,492,200.00	\$872,252.97	\$130,000.00a
Date of maturity of funded indebtedness	1930	1955	1942	1921-1931
Average interest on indebtedness	4%	4½%	5½%	5½%
Average interest on sinking fund	4%		4½%	

a Additional school district indebtedness \$346,025.00.

INDEBTEDNESS OF TOWNS

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

	Orange 16,614	Windham 13,801	Stratford 12,347	Wallington 12,010
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water				
Miscellaneous	\$750,000.00	\$430,000.00	\$481,000.00	\$561,000.00
Floating indebtedness	162,000.00	175,035.11	653,859.31	51,050.00
Gross indebtedness	\$912,000.00a	\$605,035.11	\$1,134,859.31	\$612,050.00
Purposes of creation of indebtedness:				
Current expenses	\$220,000.00	\$158,368.44	\$65,000.00	\$51,050.00
Fire and police				
Schools		341,866.67	216,000.00	133,000.00
Other public buildings		105,000.00		
Highways and bridges	150,000.00			
Parks				
Railroads				
Sewers	242,000.00		650,000.00	
Town deposit and trust funds			3,859.31	
War				
Water				
Other miscellaneous indebtedness	800,000.00		200,000.00	428,000.00
Gross indebtedness	\$912,000.00a	\$605,035.11	\$1,134,859.31	\$612,050.00
Less sinking fund	28,529.24	67,562.10	115.96	11,372.08
Net indebtedness	\$883,470.76a	\$537,473.01	\$1,134,743.35	\$600,677.92
Date of maturity of funded indebtedness	1940	1941	1925-1958	1952
Average interest on indebtedness	5%	4½%	4½%	4½%
Average interest on sinking fund	4%	4½%	4%	4%

a Additional school district indebtedness \$159,000.

	Enfield 11,719	East Hartford 11,648	Fairfield 11,475	Stonington 10,236
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water				
Miscellaneous	\$132,500.00	\$348,000.00	\$377,500.00	\$300,000.00
Floating indebtedness	112,384.56	80,745.38	12,000.00	31,784.91
Gross indebtedness	\$244,884.56	\$428,745.38	\$389,500.00	\$331,784.91
Purposes of creation of indebtedness:				
Current expenses	\$62,500.00	\$75,000.00	\$7,000.00	\$23,050.00
Fire and police				
Schools	176,500.00	200,000.00	300,000.00	150,000.00
Other public buildings				
Highways and bridges		148,000.00		
Parks				
Railroads				
Sewers				
Town deposit and trust funds	5,884.56	5,745.38	5,000.00	8,734.91
War				50,000.00
Water				
Other miscellaneous indebtedness			77,500.00	100,000.00
Gross indebtedness	\$244,884.56	\$428,745.38	\$389,500.00	\$331,784.91
Less sinking fund	10,066.67	17,588.50	22,217.78	
Net indebtedness	\$234,817.89	\$411,156.88	\$367,282.22	\$331,784.91
Date of maturity of funded indebtedness	1936	1939	1936	1939
Average interest on indebtedness	4½%	4½%	4½%	4½%
Average interest on sinking fund	4%	4%	4½%	

INDEBTEDNESS OF TOWNS

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

	Milford 10,193	Groton 9,227	Winchester 9,019	Vernon 8,898
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water			\$24,000.00	.....
Miscellaneous	\$551,200.00	\$203,000.00	\$10,000.00	\$235,000.00
Floating indebtedness .....	.....	45,339.48	4,550.84	64,800.00
Gross indebtedness	\$551,200.00	\$248,339.48a	\$338,550.84	\$299,800.00
Purposes of creation of indebtedness:				
Current expenses	\$41,000.00	\$38,500.00	\$130,000.00	\$64,800.00
Fire and police .....	.....	.....	.....	.....
Schools	200,000.00	.....	.....	50,000.00
Other public buildings	94,200.00	.....	.....	125,000.00
Highways and bridges	155,000.00	.....	.....	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers .....	.....	.....	.....	60,000.00
Town deposit and trust funds .....	.....	6,839.48	4,550.84	.....
War .....	.....	.....	.....	.....
Water .....	.....	.....	24,000.00	.....
Other miscellaneous indebted- ness	61,000.00	203,000.00	180,000.00	.....
Gross indebtedness	\$551,200.00	\$248,339.48a	\$338,550.84	\$299,800.00
Less sinking fund .....	.....	.....	85,112.57	72,926.11
Net indebtedness	\$551,200.00	\$248,339.48a	\$303,438.27	\$226,873.89
Date of maturity of funded in- debtedness	1921-1939	1920-1939	1927-1951	1944
Average interest on indebtedness	4½%	5%	4%	4½%
Average interest on sinking fund .....	.....	.....	2½%	5%

a Additional school district indebtedness \$10,700.

	West Hartford 8,854	Hamden 8,611	Southington 8,440	Putnam 8,397
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water			\$222,000.00	.....
Miscellaneous	\$450,000.00	\$227,000.00	76,000.00	\$211,000.00
Floating indebtedness	843,170.00	18,121.34	8,000.00	7,550.34
Gross indebtedness	\$793,170.00	\$245,121.34	\$306,000.00	\$218,550.34
Purposes of creation of indebtedness:				
Current expenses	\$37,000.00	\$18,121.34	.....	\$3,000.00
Fire and police .....	.....	.....	.....	.....
Schools	177,000.00	127,000.00	\$50,000.00	.....
Other public buildings .....	.....	.....	.....	.....
Highways and bridges	246,000.00	100,000.00	.....	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers	331,000.00	.....	.....	.....
Town deposit and trust funds	2,170.00	.....	.....	4,550.34
War .....	.....	.....	.....	.....
Water .....	.....	.....	230,000.00	.....
Other miscellaneous indebted- ness .....	.....	.....	26,000.00	211,000.00
Gross indebtedness	\$793,170.00	\$245,121.34	\$306,000.00	\$218,550.34
Less sinking fund	43,602.19	26,666.68	24,542.07	7,830.00
Net indebtedness	\$749,567.81	\$218,454.66	\$281,457.93	\$210,720.34
Date of maturity of funded in- debtedness	1945	1921-1933	1943	1922-1946
Average interest on indebtedness	5%	4½%	4½%	4½%
Average interest on sinking fund	4½%	4%	4%	4½%

INDEBTEDNESS OF TOWNS

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

	Killingly 8,178	Plainfield 7,926	Seymour 6,781	Branford 6,627
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water				
Miscellaneous	\$192,000.00	\$10,000.00	\$140,000.00	.....
Floating indebtedness	67,297.05	68,337.45	2,026.16	\$42,918.57
Gross indebtedness	\$259,297.05	\$78,337.45	\$142,026.16	\$42,918.57
Purposes of creation of indebtedness:				
Current expenses	\$59,800.00	\$53,775.00	.....	\$39,733.84
Fire and police				
Schools			\$52,000.00	.....
Other public buildings	67,000.00			
Highways and bridges	125,000.00			
Parks				
Railroads				
Sewers				
Town deposit and trust funds	7,897.05	14,562.45	2,026.16	3,184.73
War				
Water				
Other miscellaneous indebted-				
ness .....	.....	10,000.00	88,000.00	.....
Gross indebtedness	\$259,297.05	\$78,337.45	\$142,026.16	\$42,918.57
Less sinking fund .....	.....	5,924.47	2,604.89	.....
Net indebtedness	\$259,297.05	\$72,412.98	\$139,421.27	\$42,918.57
Date of maturity of funded in-				
debtedness	1921-1954	1928	1946	.....
Average interest on indebtedness	4%	5½%	4½%	5½%
Average interest on sinking fund	.....	4%	4%	.....

	Watertown 6,050	Flymouth 5,942	Windsor 5,620	Glastonbury 5,592
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water				
Miscellaneous	\$75,000.00	\$75,000.00	\$150,000.00	\$85,000.00
Floating indebtedness	18,152.50	53,775.53	10,000.00	127,000.88
Gross indebtedness	\$93,152.50	\$128,775.53	\$160,000.00	\$162,000.88
Purposes of creation of indebtedness:				
Current expenses .....	.....	\$51,125.00	.....	\$126,600.00
Fire and police				
Schools	\$30,000.00		\$65,000.00	.....
Other public buildings	60,000.00		10,000.00	
Highways and bridges			85,000.00	
Parks				
Railroads				
Sewers				
Town deposit and trust funds	3,152.50	2,650.53	.....	400.88
War				
Water				
Other miscellaneous indebted-				
ness .....	.....	75,000.00	.....	35,000.00
Gross indebtedness	\$93,152.50	\$128,775.53	\$160,000.00	\$162,000.88
Less sinking fund .....	.....	22,092.29	22,591.58	18,548.95
Net indebtedness	\$93,152.50	\$106,683.24	\$137,408.42	\$143,451.93
Date of maturity of funded in-				
debtedness	1924-1935	1936	1921-1946	.....
Average interest on indebtedness	4½%	4½%	4½%	5%
Average interest on sinking fund	.....	4½%	4½%	4%

INDEBTEDNESS OF TOWNS

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

	Stafford 5,407	Westport 5,114	Thompson 5,055	New Milford 4,781
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water				
Miscellaneous	\$34,000.00	\$311,000.00		\$100,000.00
Floating indebtedness	84,319.95	36,592.61	\$5,573.25	29,500.00
Gross indebtedness	\$68,319.95	\$347,592.61	\$5,573.25	\$129,500.00
Purposes of creation of indebtedness:				
Current expenses	\$27,000.00	\$198,000.00		\$14,500.00
Fire and police		10,000.00		
Schools		50,792.61		15,000.00
Other public buildings				
Highways and bridges		88,500.00		
Parks				
Railroads				
Sewers				
Town deposit and trust funds	7,319.95		\$5,573.25	
War				
Water				
Other miscellaneous indebtedness	34,000.00	2,300.00		100,000.00
Gross indebtedness	\$68,319.95	\$347,592.61	\$5,573.25	\$129,500.00
Less sinking fund				
Net indebtedness	\$68,319.95	\$347,592.61	\$5,573.25	\$129,500.00
Date of maturity of funded indebtedness	1921-1937	1920-1943		1949
Average interest on indebtedness	4 1/2 %	4 1/2 %	4 %	4 1/2 %
Average interest on sinking fund				

	Wethersfield 4,342	Berlin 4,298	Griswold 4,220	Darien 4,184
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water				
Miscellaneous	\$62,000.00	\$70,000.00	\$111,000.00	\$170,000.00
Floating indebtedness	37,377.04			38,250.00
Gross indebtedness	\$99,377.04	\$70,000.00	\$111,000.00	\$208,250.00
Purposes of creation of indebtedness:				
Current expenses	\$20,800.00		\$111,000.00	\$20,000.00
Fire and police				
Schools	63,000.00	\$70,000.00		74,150.00
Other public buildings				
Highways and bridges				112,100.00
Parks				
Railroads				
Sewers				
Town deposit and trust funds	3,577.04			
War				
Water				
Other miscellaneous indebtedness	12,000.00			
Gross indebtedness	\$99,377.04	\$70,000.00	\$111,000.00	\$208,250.00
Less sinking fund				
Net indebtedness	\$99,377.04	\$70,000.00	\$111,000.00	\$208,250.00
Date of maturity of funded indebtedness	1921-1951	1921-1955	1921-1951	1921-1952
Average interest on indebtedness	5 %	4 %	4 1/2 %	4 1/2 %
Average interest on sinking fund				

a Additional school district indebtedness \$22,000.00.

INDEBTEDNESS OF TOWNS

As of close of fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

	Plainville	Sumfield	Thomaston	Waterford
<i>Population 1920 census:</i>	4,114	4,070	3,993	3,985
Funded indebtedness:				
Water .....	.....	.....	.....	.....
Miscellaneous .....	.....	.....	\$50,000.00	\$90,000.00
Floating indebtedness	\$58,000.00	.....	7,650.52	114,232.87
Gross indebtedness	\$58,000.00	.....	\$57,650.52	\$204,232.87
Purposes of creation of indebtedness:				
Current expenses .....	.....	.....	\$5,000.00	.....
Fire and police .....	.....	.....	.....	.....
Schools	\$32,000.00	.....	.....	\$106,800.00
Other public buildings .....	.....	.....	50,000.00	.....
Highways and bridges .....	.....	.....	.....	57,432.87
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers .....	.....	.....	.....	.....
Town deposit and trust funds .....	.....	.....	2,650.52	.....
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebtedness	26,000.00	.....	.....	40,000.00
Gross indebtedness	\$58,000.00	.....	\$57,650.52	\$204,232.87
Less sinking fund .....	.....	.....	.....	.....
Net indebtedness	\$58,000.00	.....	\$57,650.52	\$204,232.87
Date of maturity of funded indebtedness	1920-1948	.....	1924	1927
Average interest on indebtedness	4%	.....	4½%	4½%
Average interest on sinking fund .....	.....	.....	.....	.....

	New Canaan	Farmington	East Windsor	Portland
<i>Population 1920 census:</i>	3,895	3,844	3,741	3,644
Funded indebtedness:				
Water .....	.....	.....	.....	.....
Miscellaneous	\$240,000.00	.....	.....	\$168,000.00
Floating indebtedness .....	.....	\$112,000.00	\$105,266.97	19,800.00
Gross indebtedness	\$240,000.00	\$112,000.00	\$105,266.97	\$187,800.00
Purposes of creation of indebtedness:				
Current expenses .....	.....	\$112,000.00	.....	\$16,500.00
Fire and police .....	.....	.....	.....	.....
Schools	\$45,000.00	.....	\$20,000.00	.....
Other public buildings	50,000.00	.....	.....	.....
Highways and bridges	40,000.00	.....	80,000.00	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	168,000.00
Sewers .....	.....	.....	.....	.....
Town deposit and trust funds .....	.....	.....	5,266.97	3,100.00
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebtedness	105,000.00	.....	.....	.....
Gross indebtedness	\$240,000.00	\$112,000.00	\$105,266.97	\$187,600.00
Less sinking fund	11,947.33	.....	.....	.....
Net indebtedness	\$228,052.67	\$112,000.00	\$105,266.97	\$187,600.00
Date of maturity of funded indebtedness	1939	.....	.....	1929
Average interest on indebtedness	4%	5½%	4½%	4½%
Average interest on sinking fund	4%	.....	.....	.....

INDEBTEDNESS OF TOWNS

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

	Windsor Locks	East Haven	Montville	Bethel
<i>Population 1920 census:</i>	3,554	3,520	3,411	3,201
Funded indebtedness:				
Water				\$50,000.00
Miscellaneous	\$95,000.00	\$35,000.00	\$30,000.00	35,000.00
Floating indebtedness	106,000.00	44,377.20	24,100.00	38,792.93
Gross indebtedness	\$201,000.00	\$79,377.20	\$54,100.00	\$121,792.93a
Purposes of creation of indebtedness:				
Current expenses	\$106,000.00	\$43,121.90	\$24,100.00	\$33,500.00
Fire and police				
Schools		35,000.00		
Other public buildings				
Highways and bridges				
Parks				
Railroads				
Sewers	50,000.00			
Town deposit and trust funds		1,255.80		3,292.93
War			30,000.00	
Water				50,000.00
Other miscellaneous indebtedness	45,000.00			35,000.00
Gross indebtedness	\$201,000.00	\$79,377.20	\$54,100.00	\$121,792.93a
Less sinking fund	45,829.28	5,717.97		6,363.17
Net indebtedness	\$155,170.72	\$73,659.23	\$54,100.00	\$115,429.66a
Date of maturity of funded indebtedness	1935	1936	1937	1939
Average interest on indebtedness	5½%	4½%	4%	4½%
Average interest on sinking fund	4%	4%		4½%

a Additional school district indebtedness \$5,560.32.

	Litchfield	Simsbury	Cheshire	Essex
<i>Population 1920 census:</i>	3,180	2,958	2,855	2,815
Funded indebtedness:				
Water				\$26,000.00
Miscellaneous	\$68,000.00			3,460.83
Floating indebtedness			\$53,500.00	
Gross indebtedness	\$68,000.00		\$53,500.00	\$29,460.83
Purposes of creation of indebtedness:				
Current expenses			\$46,314.91	
Fire and police				
Schools				
Other public buildings				
Highways and bridges				
Parks				
Railroads	\$68,000.00			\$26,000.00
Sewers				
Town deposit and trust funds			7,185.09	3,460.83
War				
Water				
Other miscellaneous indebtedness				
Gross indebtedness	\$68,000.00		\$53,500.00	\$29,460.83
Less sinking fund				
Net indebtedness	\$68,000.00		\$53,500.00	\$29,460.83
Date of maturity of funded indebtedness				1939
Average interest on indebtedness	4%		5%	3½%
Average interest on sinking fund				

INDEBTEDNESS OF TOWNS

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

	Guilford 2,803	Newtown 2,751	Preston 2,743	Bridgefield 2,707
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water .....	.....	.....	\$45,000.00	\$100,000.00
Miscellaneous .....	.....	.....	8,637.21	5,760.16
Floating indebtedness	\$55,850.00	\$46,000.00		
Gross indebtedness	\$55,850.00	\$46,000.00	\$53,637.21	\$105,760.16
Purposes of creation of indebtedness:				
Current expenses	\$55,850.00	\$46,000.00	\$4,000.00	\$60,000.00
Fire and police .....	.....	.....	.....	40,000.00
Schools .....	.....	.....	.....	.....
Other public buildings .....	.....	.....	.....	.....
Highways and bridges .....	.....	.....	.....	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers .....	.....	.....	.....	.....
Town deposit and trust funds .....	.....	.....	4,637.21	5,760.16
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebtedness .....	.....	.....	45,000.00	.....
Gross indebtedness	\$55,850.00	\$46,000.00	\$53,637.21	\$105,760.16
Less sinking fund .....	.....	.....	.....	45,356.93
Net indebtedness	\$55,850.00	\$46,000.00	\$53,637.21	\$60,403.23
Date of maturity of funded indebtedness .....	.....	.....	1931	1956
Average interest on indebtedness	5%	5%	4½%	4%
Average interest on sinking fund .....	.....	.....	.....	4%

	Trumbull 2,597	Mansfield 2,574	Canton 2,549	Sprague 2,500
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water .....	.....	.....	\$20,000.00	\$130,000.00
Miscellaneous	\$80,000.00	.....	44,596.86	20,000.00
Floating indebtedness	32,639.88	\$64,884.34		
Gross indebtedness	\$112,639.88	\$64,884.34	\$64,596.86	\$150,000.00
Purposes of creation of indebtedness:				
Current expenses	\$31,550.00	\$57,350.00	\$27,000.00	\$80,000.00
Fire and police .....	.....	.....	.....	.....
Schools	80,000.00	.....	7,500.00	.....
Other public buildings .....	.....	.....	20,000.00	.....
Highways and bridges .....	.....	.....	.....	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	5,000.00	.....
Sewers .....	.....	.....	.....	.....
Town deposit and trust funds	1,089.88	7,534.34	5,096.86	.....
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebtedness .....	.....	.....	.....	70,000.00
Gross indebtedness	\$112,639.88	\$64,884.34	\$64,596.86	\$150,000.00
Less sinking fund .....	.....	.....	5,396.07	8,350.46
Net indebtedness	\$112,639.88	\$64,884.34	\$59,200.79	\$141,640.54
Date of maturity of funded indebtedness	1940	.....	1924	1947
Average interest on indebtedness	5½%	4½%	4½%	4½%
Average interest on sinking fund .....	.....	.....	4%	4%

INDEBTEDNESS OF TOWNS

As of close of fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

	Salisbury 2,497	Gromwell 2,454	Bloomfield 2,394	East Hampton 2,394
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water				
Miscellaneous	\$15,500.00	\$15,000.00	\$23,000.00	\$78,640.00
Floating indebtedness		5,000.00	69,539.49	3,710.00
Gross indebtedness	\$15,500.00a	\$20,000.00	\$92,539.49	\$82,350.00
Purposes of creation of indebtedness:				
Current expenses		\$5,000.00	\$30,511.70	.....
Fire and police				
Schools			\$5,000.00	\$35,000.00
Other public buildings				
Highways and bridges				
Parks				
Railroads	\$15,500.00		23,000.00	
Sewers				43,640.00
Town deposit and trust funds			4,027.79	3,710.00
War				
Water				
Other miscellaneous indebtedness		15,000.00		
Gross indebtedness	\$15,500.00a	\$20,000.00	\$92,539.49	\$82,350.00
Less sinking fund				2,114.18
Net indebtedness	\$15,500.00a	\$20,000.00	\$92,539.49	\$80,235.82
Date of maturity of funded indebtedness		1920	1921-1943	1944
Average interest on indebtedness	5%	4½%	4½%	4½%
Average interest on sinking fund				4%

a Additional school district indebtedness \$1,900.00.

	Newington 2,381	Saybrook 2,325	East Haddam 2,312	East Lyme 2,291
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water				
Miscellaneous	\$76,000.00	\$39,000.00	\$24,700.00	\$78,500.00
Floating indebtedness	25,385.00	27,500.00	7,362.58	.....
Gross indebtedness	\$101,385.00	\$66,500.00	\$32,062.58	\$78,500.00
Purposes of creation of indebtedness:				
Current expenses	\$25,385.00	\$20,000.00	\$19,700.00	\$68,000.00
Fire and police				
Schools	40,000.00	44,000.00	5,000.00	10,500.00
Other public buildings				
Highways and bridges	36,000.00	1,000.00		
Parks				
Railroads				
Sewers				
Town deposit and trust funds		1,500.00	7,362.58	
War				
Water				
Other miscellaneous indebtedness				
Gross indebtedness	\$101,385.00	\$66,500.00	\$32,062.58	\$78,500.00
Less sinking fund	3,080.68	7,887.36		
Net indebtedness	\$98,304.32	\$58,612.64	\$32,062.58	\$78,500.00
Date of maturity of funded indebtedness	1921-1958	1943	demand	1961
Average interest on indebtedness	4½%	5½%	4½%	4½%
Average interest on sinking fund	4%	4%		

INDEBTEDNESS OF TOWNS

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

	South Windsor 2,142	Millington 2,127	Colchester 2,050	Marwinton 2,020
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water .....	.....	.....	.....	.....
Miscellaneous .....	.....	.....	\$28,000.00	.....
Floating indebtedness	\$52,559.21	\$45,500.00	.....	\$64,633.60
Gross indebtedness	\$52,559.21	\$45,500.00	\$28,000.00a	\$64,633.60
Purposes of creation of indebtedness:				
Current expenses	\$41,500.00	\$28,500.00	.....	\$42,840.00
Fire and police .....	.....	.....	.....	.....
Schools	7,000.00	.....	.....	8,000.00
Other public buildings .....	.....	16,000.00	.....	11,000.00
Highways and bridges .....	.....	.....	.....	900.00
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	\$23,000.00	.....
Sewers .....	.....	.....	.....	.....
Town deposit and trust funds	4,059.21	1,000.00	.....	3,893.60
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebtedness .....	.....	.....	5,000.00	.....
Gross indebtedness	\$52,559.21	\$45,500.00	\$28,000.00a	\$64,633.60
Less sinking fund .....	.....	8,411.97	.....	.....
Net indebtedness	\$52,559.21	\$37,088.03	\$28,000.00a	\$64,633.60
Date of maturity of funded indebtedness .....	.....	.....	1935-1958	.....
Average interest on indebtedness	5½%	4½%	3½%	5%
Average interest on sinking fund .....	.....	5%	.....	.....

a Additional school district indebtedness \$797.50.

	North Haven 1,968	North Canaan 1,933	Madison 1,857	New Hartford 1,781
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water .....	.....	.....	.....	.....
Miscellaneous	\$75,000.00	\$14,000.00	.....	\$22,000.00
Floating indebtedness	8,417.20	45,564.60	\$43,516.13	35,000.00
Gross indebtedness	\$81,417.20	\$59,564.60	\$43,516.13	\$57,000.00
Purposes of creation of indebtedness:				
Current expenses	\$2,500.00	\$24,000.00	.....	\$4,000.00
Fire and police .....	.....	.....	.....	.....
Schools	825.00	4,000.00	\$1,500.00	8,000.00
Other public buildings .....	.....	.....	15,000.00	.....
Highways and bridges .....	.....	10,000.00	18,000.00	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	14,000.00	.....	.....
Sewers .....	.....	.....	.....	.....
Town deposit and trust funds	3,292.20	7,564.60	5,216.13	.....
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebtedness	75,000.00	.....	3,800.00	45,000.00
Gross indebtedness	\$81,417.20	\$59,564.60	\$43,516.13	\$57,000.00
Less sinking fund	24,397.15	.....	.....	2,954.39
Net indebtedness	\$57,020.05	\$59,564.60	\$43,516.13	\$54,045.61
Date of maturity of funded indebtedness	1943	demand	.....	1921
Average interest on indebtedness	4½%	4½%	5%	4½%
5½% .....	.....	4½% Average interest on sinking fund	.....	.....

INDEBTEDNESS OF TOWNS

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

	Woodstock 1,787	Haddam 1,736	Woodbury 1,698	Chester 1,675
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water .....	.....	.....	.....	.....
Miscellaneous .....	.....	.....	.....	.....
Floating indebtedness	\$15,458.85	\$6,000.00	\$48,182.07	\$15,750.00
Gross indebtedness	\$15,458.85	\$6,000.00	\$48,182.07	\$15,750.00
Purposes of creation of indebtedness:				
Current expenses	\$7,075.00	\$3,000.00	\$43,182.07	\$4,250.00
Fire and police .....	.....	3,000.00	.....	8,000.00
Schools .....	.....	.....	.....	.....
Other public buildings .....	.....	.....	.....	.....
Highways and bridges .....	.....	.....	.....	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers .....	.....	.....	.....	.....
Town deposit and trust funds	8,383.85	.....	5,000.00	.....
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebted-	.....	.....	.....	3,500.00
ness .....	.....	.....	.....	.....
Gross indebtedness	\$15,458.85	\$6,000.00	\$48,182.07	\$15,750.00
Less sinking fund .....	.....	.....	.....	.....
Net indebtedness	\$15,458.85	\$6,000.00	\$48,182.07	\$15,750.00
Date of maturity of funded in-	.....	.....	.....	1921-1928
debtedness	4½%	7%	4½%	4½%
Average interest on indebtedness	.....	.....	.....	.....
Average interest on sinking fund	.....	.....	.....	.....

	Somers 1,673	Brooklyn 1,655	Rocky Hill 1,633	Washington 1,619
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water .....	.....	.....	.....	.....
Miscellaneous .....	.....	\$10,000.00	\$15,000.00	\$28,000.00
Floating indebtedness	\$32,682.40	46,377.27	53,518.22	19,963.00
Gross indebtedness	\$32,682.40	\$56,377.27	\$68,518.22	\$47,963.00
Purposes of creation of indebtedness:				
Current expenses	\$8,325.00	.....	\$23,856.25	.....
Fire and police .....	.....	.....	.....	.....
Schools	14,750.00	.....	17,000.00	\$28,000.00
Other public buildings .....	.....	.....	.....	.....
Highways and bridges	8,000.00	\$10,000.00	.....	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	15,000.00	.....
Sewers .....	.....	.....	.....	.....
Town deposit and trust funds	1,607.40	.....	5,161.97	4,163.00
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebted-	.....	46,377.27	7,500.00	15,800.00
ness .....	.....	.....	.....	.....
Gross indebtedness	\$32,682.40	\$56,377.27	\$68,518.22	\$47,963.00
Less sinking fund .....	.....	5,791.72	.....	.....
Net indebtedness	\$32,682.40	\$50,585.55	\$68,518.22	\$47,963.00
Date of maturity of funded in-	.....	1928	.....	1921-1923
debtedness	5%	4½%	5%	4½%
Average interest on indebtedness	.....	4%	.....	.....
Average interest on sinking fund	.....	.....	.....	.....

INDEBTEDNESS OF TOWNS

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

	Beacon Falls	Sharon	Coventry	Avon
<i>Population 1920 census:</i>	1,593	1,585	1,582	1,534
Funded indebtedness:				
Water .....	.....	.....	.....	.....
Miscellaneous .....	.....	.....	.....	.....
Floating indebtedness	\$10,871.83	\$13,869.27	\$19,246.77	.....
Gross indebtedness	\$10,871.83	\$13,869.27	\$19,246.77	.....
Purposes of creation of indebtedness:				
Current expenses	\$10,000.00	\$6,300.00	\$14,000.00	.....
Fire and police .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Other public buildings .....	.....	.....	.....	.....
Highways and bridges .....	.....	.....	.....	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers .....	.....	.....	.....	.....
Town deposit and trust funds	871.83	7,569.27	5,246.77	.....
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebtedness .....	.....	.....	.....	.....
Gross indebtedness	\$10,871.83	\$13,869.27	\$19,246.77	.....
Less sinking fund .....	.....	.....	.....	.....
Net indebtedness	\$10,871.83	\$13,869.27	\$19,246.77	.....
Date of maturity of funded indebtedness .....	.....	.....	.....	.....
Average interest on indebtedness	5%	4%	5%	.....
Average interest on sinking fund .....	.....	.....	.....	.....

	Old Saybrook	Pomfret	Lebanon	Granby
<i>Population 1920 census:</i>	1,463	1,454	1,343	1,342
Funded indebtedness:				
Water .....	.....	.....	.....	.....
Miscellaneous .....	.....	.....	.....	.....
Floating indebtedness	\$44,538.86	\$9,607.19	\$38,279.07	\$23,651.42
Gross indebtedness	\$44,538.86	\$9,607.19	\$38,279.07	\$23,651.42
Purposes of creation of indebtedness:				
Current expenses	\$10,500.00	\$2,900.00	\$31,226.00	.....
Fire and police .....	.....	.....	.....	.....
Schools	17,000.00	.....	.....	.....
Other public buildings	15,000.00	.....	.....	\$3,700.00
Highways and bridges .....	.....	.....	.....	14,816.00
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers .....	.....	.....	.....	.....
Town deposit and trust funds	2,038.86	6,707.19	7,053.07	4,935.42
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebtedness .....	.....	.....	.....	200.00
Gross indebtedness	\$44,538.86	\$9,607.19	\$38,279.07	\$23,651.42
Less sinking fund .....	.....	.....	.....	.....
Net indebtedness	\$44,538.86	\$9,607.19	\$38,279.07	\$23,651.42
Date of maturity of funded indebtedness .....	.....	.....	.....	.....
Average interest on indebtedness	4½%	5½%	4%	4½%
Average interest on sinking fund .....	.....	.....	.....	.....

INDEBTEDNESS OF TOWNS

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

	Bedding 1,315	Wilton 1,284	Sterling 1,266	Norfolk 1,229
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water				
Miscellaneous	\$12,800.00	\$25,000.00		\$44,000.00
Floating indebtedness	15,438.79		\$19,000.00	24,000.00
Gross indebtedness	\$28,238.79	\$25,000.00	\$19,000.00	\$68,000.00
Purposes of creation of indebtedness:				
Current expenses	\$10,700.00		\$19,000.00	\$24,000.00
Fire and police				
Schools				
Other public buildings				
Highways and bridges				15,000.00
Parks				
Railroads				29,000.00
Sewers				
Town deposit and trust funds	4,738.79			
War				
Water				
Other miscellaneous indebtedness				
	12,800.00	\$25,000.00		
Gross indebtedness	\$28,238.79	\$25,000.00	\$19,000.00	\$68,000.00
Less sinking fund	2,000.00	3,067.45		3,778.41
Net indebtedness	\$26,238.79	\$21,932.55	\$19,000.00	\$64,221.59
Date of maturity of funded indebtedness	1929	1923		1929
Average interest on indebtedness	3½%	5%	5%	4½%
Average interest on sinking fund	4½%	4%		4%

	Clinton 1,217	Willington 1,200	Woodbridge 1,170	Ledyard 1,161
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water				
Miscellaneous			\$35,000.00	
Floating indebtedness	\$23,356.86	\$3,351.67	2,493.86	\$9,308.00
Gross indebtedness	\$23,356.86	\$3,351.67	\$37,493.86	\$9,308.00
Purposes of creation of indebtedness:				
Current expenses	\$10,486.89			\$2,000.00
Fire and police				
Schools				
Other public buildings			\$35,000.00	1,800.00
Highways and bridges				
Parks				
Railroads				
Sewers				
Town deposit and trust funds	3,869.97	\$3,351.67	2,493.86	5,508.00
War				
Water				
Other miscellaneous indebtedness				
Gross indebtedness	\$23,356.86	\$3,351.67	\$37,493.86	\$9,308.00
Less sinking fund				
Net indebtedness	\$23,356.86	\$3,351.67	\$37,493.86	\$9,308.00
Date of maturity of funded indebtedness			1941	
Average interest on indebtedness	5½%	5%	4½%	4%
Average interest on sinking fund				

INDEBTEDNESS OF TOWNS

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

	Monroe	North Stonington	North Branford	Burlington
<i>Population 1920 census:</i>	1,161	1,144	1,110	1,109
Funded indebtedness:				
Water .....	.....	.....	.....	.....
Miscellaneous .....	.....	.....	\$33,000.00	.....
Floating indebtedness	\$21,210.29	\$41,082.51	.....	\$15,111.58
Gross indebtedness	\$21,210.29	\$41,082.51	\$33,000.00	\$15,111.58
Purposes of creation of indebtedness:				
Current expenses	\$7,000.00	\$34,100.00	\$17,000.00	\$11,700.00
Fire and police .....	.....	.....	16,000.00	.....
Schools .....	.....	.....	.....	.....
Other public buildings	1,000.00	.....	.....	.....
Highways and bridges	4,000.00	.....	.....	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers .....	.....	.....	.....	.....
Town deposit and trust funds	6,000.00	6,982.51	.....	8,411.58
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebted- ness	3,210.29	.....	.....	.....
Gross indebtedness	\$21,210.29	\$41,082.51	\$33,000.00	\$15,111.58
Less sinking fund .....	.....	.....	2,000.00	.....
Net indebtedness	\$21,210.29	\$41,082.51	\$31,000.00	\$15,111.58
Date of maturity of funded in- debtedness .....	.....	.....	1935	.....
Average interest on indebtedness	5%	4½%	5%	5%
Average interest on sinking fund .....	.....	.....	4%	.....

	Southbury	Kent	Middlebury	East Granby
<i>Population 1920 census:</i>	1,093	1,086	1,067	1,056
Funded indebtedness:				
Water .....	.....	.....	.....	.....
Miscellaneous .....	.....	.....	.....	.....
Floating indebtedness	\$42,898.91	\$30,200.00	\$23,100.00	\$23,500.00
Gross indebtedness	\$42,898.91	\$30,200.00	\$23,100.00	\$23,500.00
Purposes of creation of indebtedness:				
Current expenses	\$38,900.00	\$30,200.00	\$1,000.00	\$4,100.00
Fire and police .....	.....	.....	.....	.....
Schools .....	.....	.....	4,000.00	.....
Other public buildings .....	.....	.....	12,000.00	.....
Highways and bridges .....	.....	.....	.....	19,400.00
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers .....	.....	.....	.....	.....
Town deposit and trust funds	3,998.91	.....	2,100.00	.....
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebted- ness .....	.....	.....	4,000.00	.....
Gross indebtedness	\$42,898.91	\$30,200.00	\$23,100.00	\$23,500.00
Less sinking fund .....	.....	.....	.....	.....
Net indebtedness	\$42,898.91	\$30,200.00	\$23,100.00	\$23,500.00
Date of maturity of funded in- debtedness .....	.....	.....	.....	.....
Average interest on indebtedness	5½%	5½%	5½%	5%
Average interest on sinking fund .....	.....	.....	.....	.....

INDEBTEDNESS OF TOWNS

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

	Middlefield 1,047	Tolland 1,040	Easton 1,017	Oxford 998
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water				
Miscellaneous	\$1,000.00		\$8,000.00	
Floating indebtedness	1,508.24	\$33,700.00	4,923.75	\$35,745.00
Gross indebtedness	\$2,508.24	\$33,700.00	\$7,923.75	\$35,745.00
Purposes of creation of indebtedness:				
Current expenses		\$33,700.00	\$2,500.00	\$6,578.00
Fire and police				5,000.00
Schools				
Other public buildings				
Highways and bridges			3,000.00	10,000.00
Parks				
Railroads	\$1,000.00			
Sewers				
Town deposit and trust funds	1,508.24		2,323.00	4,169.00
War				
Water				
Other miscellaneous indebted-				
ness			100.75	10,000.00
Gross indebtedness	\$2,508.24	\$33,700.00	\$7,923.75	\$35,745.00
Less sinking fund			5,600.00	
Net indebtedness	\$2,508.24	\$33,700.00	\$2,323.75	\$35,745.00
Date of maturity of funded in-				
debtedness	1920		1939	
Average interest on indebtedness	5½ %	5½ %	4½ %	5½ %
Average interest on sinking fund			4½ %	

	Durham 959	Old Lyme 946	Hebron 915	Brookfield 896
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water				
Miscellaneous			\$17,400.00	
Floating indebtedness	\$17,000.00	\$23,050.00	15,867.71	\$11,600.00
Gross indebtedness	\$17,000.00	\$23,050.00	\$33,267.71	\$11,600.00
Purposes of creation of indebtedness:				
Current expenses			\$11,350.00	\$6,600.00
Fire and police				
Schools				
Other public buildings				
Highways and bridges	\$17,000.00	\$10,050.00		5,000.00
Parks				
Railroads			17,400.00	
Sewers				
Town deposit and trust funds			4,517.71	
War		13,000.00		
Water				
Other miscellaneous indebted-				
ness				
Gross indebtedness	\$17,000.00	\$23,050.00	\$33,267.71	\$11,600.00
Less sinking fund			4,500.00	
Net indebtedness	\$17,000.00	\$23,050.00	\$28,767.71	\$11,600.00
Date of maturity of funded in-				
debtedness			1921-1929	
Average interest on indebtedness	6 %	5 %	4 %	5½ %
Average interest on sinking fund			5 %	

INDEBTEDNESS OF TOWNS

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

	Canterbury 896	Lisbon 867	Borrah 858	Westbrook 849
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water .....	.....	.....	.....	.....
Miscellaneous .....	.....	\$28,000.00	.....	.....
Floating indebtedness	\$10,233.00	15,865.81	\$16,200.00	\$20,175.00
Gross indebtedness	\$10,233.00	\$43,865.81	\$16,200.00	\$20,175.00
Purposes of creation of indebtedness:				
Current expenses	\$7,500.00	\$14,100.00	.....	\$18,000.00
Fire and police .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Other public buildings .....	.....	.....	.....	.....
Highways and bridges .....	.....	.....	\$16,200.00	4,500.00
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers .....	.....	.....	.....	.....
Town deposit and trust funds	2,733.00	1,765.81	.....	2,675.00
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebtedness .....	.....	28,000.00	.....	.....
Gross indebtedness	\$10,233.00	\$43,865.81	\$16,200.00	\$20,175.00
Less sinking fund .....	.....	12,108.03	.....	.....
Net indebtedness	\$10,233.00	\$31,757.78	\$16,200.00	\$20,175.00
Date of maturity of funded indebtedness .....	.....	1936	.....	.....
Average interest on indebtedness	6%	4½%	5%	5½%
Average interest on sinking fund .....	.....	4%	.....	.....

	Cornwall 834	Barkhamsted 719	Wolcott 719	Columbia 706
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water .....	.....	.....	.....	.....
Miscellaneous .....	.....	\$12,000.00	.....	.....
Floating indebtedness	\$21,149.14	17,000.00	\$5,000.00	\$14,788.88
Gross indebtedness	\$21,149.14	\$29,000.00	\$5,000.00	\$14,788.88
Purposes of creation of indebtedness:				
Current expenses	\$16,500.00	\$5,300.00	\$5,000.00	\$14,500.00
Fire and police .....	.....	.....	.....	.....
Schools .....	.....	3,200.00	.....	.....
Other public buildings .....	.....	.....	.....	.....
Highways and bridges .....	.....	8,500.00	.....	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers .....	.....	.....	.....	.....
Town deposit and trust funds	4,649.14	.....	.....	288.88
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebtedness .....	.....	12,000.00	.....	.....
Gross indebtedness	\$21,149.14	\$29,000.00	\$5,000.00	\$14,788.88
Less sinking fund .....	.....	.....	.....	.....
Net indebtedness	\$21,149.14	\$29,000.00	\$5,000.00	\$14,788.88
Date of maturity of funded indebtedness .....	.....	1921-1944	.....	.....
Average interest on indebtedness	5½%	4½%	5½%	5%
Average interest on sinking fund .....	.....	.....	.....	.....

INDEBTEDNESS OF TOWNS

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

	Weston 703	Goshen 675	Lyme 674	Ashford 673
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water				
Miscellaneous			\$28,000.00	
Floating indebtedness	\$16,543.00	\$4,000.00	15,615.58	\$10,726.06
Gross indebtedness	\$16,543.00	\$4,000.00	\$43,615.58	\$10,726.06
Purposes of creation of indebtedness:				
Current expenses	\$15,493.00	\$4,000.00	\$11,900.00	\$2,700.00
Fire and police				
Schools				
Other public buildings				
Highways and bridges	1,050.00			
Parks				
Railroads				
Sewers				
Town deposit and trust funds			3,715.58	8,026.06
War			28,000.00	
Water				
Other miscellaneous indebtedness				
Gross indebtedness	\$16,543.00	\$4,000.00	\$43,615.58	\$10,726.06
Less sinking fund			1,116.98	
Net indebtedness	\$16,543.00	\$4,000.00	\$42,498.60	\$10,726.06
Date of maturity of funded indebtedness			1938	
Average interest on indebtedness	5%	5½%	5%	4½%
Average interest on sinking fund			4%	

	Voluntown 656	Boxbury 647	Canaan 561	Franklin 552
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water				
Miscellaneous	\$10,000.00	\$6,000.00	\$10,000.00	
Floating indebtedness	8,349.13	10,801.67	3,000.17	\$10,129.75
Gross indebtedness	\$18,349.13	\$16,801.67	\$13,000.17	\$10,129.75
Purposes of creation of indebtedness:				
Current expenses	\$5,000.00	\$7,820.00		
Fire and police				
Schools				
Other public buildings				
Highways and bridges				\$10,129.75
Parks				
Railroads		6,000.00		
Sewers				
Town deposit and trust funds	3,349.13	2,981.67	\$3,000.17	
War				
Water				
Other miscellaneous indebtedness	10,000.00		10,000.00	
Gross indebtedness	\$18,349.13	\$16,801.67	\$13,000.17	\$10,129.75
Less sinking fund	1,193.90			
Net indebtedness	\$17,155.23	\$16,801.67	\$13,000.17	\$10,129.75
Date of maturity of funded indebtedness	1932	1920-1926	1921-1930	
Average interest on indebtedness	5%	5½%	4½%	5%
Average interest on sinking fund	4%			

INDEBTEDNESS OF TOWNS

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

	Bethlehem 538	Sherman 533	Killingworth 531	Morris 499
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water .....	.....	.....	.....	.....
Miscellaneous .....	.....	.....	.....	.....
Floating indebtedness	\$15,831.92	\$13,386.28	\$4,716.66	\$2,217.00
Gross indebtedness	\$15,831.92	\$13,386.28	\$4,716.66	\$2,217.00
Purposes of creation of indebtedness:				
Current expenses	\$12,000.00	\$11,600.00	\$2,800.00	.....
Fire and police .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Other public buildings .....	.....	.....	.....	.....
Highways and bridges .....	.....	.....	.....	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers .....	.....	.....	.....	.....
Town deposit and trust funds	3,831.92	1,786.28	2,116.66	\$2,217.00
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebted-	.....	.....	.....	.....
ness .....	.....	.....	.....	.....
Gross indebtedness	\$15,831.92	\$13,386.28	\$4,716.66	\$2,217.00
Less sinking fund .....	.....	.....	823.49	.....
Net indebtedness	\$15,831.92	\$13,386.28	\$4,093.17	\$2,217.00
Date of maturity of funded in-				
debtedness .....	.....	.....	.....	.....
Average interest on indebtedness	5½%	4½%	5½%	4%
Average interest on sinking fund	.....	.....	4%	.....

	Eastford 496	Colebrook 492	Bridgewater 481	Hampton 475
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water .....	.....	.....	.....	.....
Miscellaneous .....	.....	.....	.....	.....
Floating indebtedness	\$19,258.00	\$19,335.61	\$15,400.00	\$2,828.28
Gross indebtedness	\$19,258.00	\$19,335.61	\$15,400.00	\$2,828.28
Purposes of creation of indebtedness:				
Current expenses .....	.....	\$7,200.00	.....	.....
Fire and police .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Other public buildings .....	.....	.....	\$2,000.00	.....
Highways and bridges .....	.....	7,000.00	11,000.00	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers .....	.....	.....	.....	.....
Town deposit and trust funds	\$3,161.00	5,135.61	2,400.00	\$2,828.28
War	16,097.00	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebted-	.....	.....	.....	.....
ness .....	.....	.....	.....	.....
Gross indebtedness	\$19,258.00	\$19,335.61	\$15,400.00	\$2,828.28
Less sinking fund .....	.....	.....	.....	.....
Net indebtedness	\$19,258.00	\$19,335.61	\$15,400.00	\$2,828.28
Date of maturity of funded in-				
debtedness .....	.....	.....	.....	.....
Average interest on indebtedness	4%	5½%	5½%	5%
Average interest on sinking fund	.....	.....	.....	.....

INDEBTEDNESS OF TOWNS

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

	New Fairfield 468	Bolton 448	Hartland 448	Salem 424
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water .....	.....	.....	.....	.....
Miscellaneous .....	.....	.....	.....	.....
Floating indebtedness	\$8,500.00	\$3,500.00	.....	\$11,863.04
Gross indebtedness	\$8,500.00	\$3,500.00	.....	\$11,863.04
Purposes of creation of indebtedness:				
Current expenses	\$6,000.00	\$3,500.00	.....	.....
Fire and police .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Other public buildings .....	.....	.....	.....	.....
Highways and bridges .....	.....	.....	.....	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers .....	.....	.....	.....	.....
Town deposit and trust funds	2,500.00	.....	.....	\$2,463.04
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebted- ness .....	.....	.....	.....	9,400.00
Gross indebtedness	\$8,500.00	\$3,500.00	.....	\$11,863.04
Less sinking fund .....	.....	.....	.....	.....
Net indebtedness	\$8,500.00	\$3,500.00	.....	\$11,863.04
Date of maturity of funded in- debtcdness .....	.....	.....	.....	.....
Average interest on indebtedness	6%	4½%	.....	5½%
Average interest on sinking fund .....	.....	.....	.....	.....

	Bethany 411	Scotland 391	Andover 389	Chaplin 385
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water .....	.....	.....	.....	.....
Miscellaneous .....	.....	.....	.....	.....
Floating indebtedness	\$7,701.32	\$3,706.47	\$7,983.23	\$5,722.66
Gross indebtedness	\$7,701.32	\$3,706.47	\$7,983.23	\$5,722.66
Purposes of creation of indebtedness:				
Current expenses .....	.....	.....	.....	\$2,650.00
Fire and police .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Other public buildings	\$6,500.00	.....	.....	.....
Highways and bridges .....	.....	.....	.....	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers .....	.....	.....	.....	.....
Town deposit and trust funds	1,201.32	\$2,106.47	\$7,983.23	3,072.66
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebted- ness .....	.....	1,600.00	.....	.....
Gross indebtedness	\$7,701.32	\$3,706.47	\$7,983.23	\$5,722.66
Less sinking fund .....	.....	.....	.....	.....
Net indebtedness	\$7,701.32	\$3,706.47	\$7,983.23	\$5,722.66
Date of maturity of funded in- debtcdness .....	.....	.....	.....	.....
Average interest on indebtedness	4½%	5½%	6%	5½%
Average interest on sinking fund .....	.....	.....	.....	.....

INDEBTEDNESS OF TOWNS

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of population—1920 census

	Warren 850	Marlborough 303	Prospect 266	Union 257
<i>Population 1920 census:</i>				
Funded indebtedness:				
Water .....	.....	.....	.....	.....
Miscellaneous .....	.....	.....	.....	.....
Floating indebtedness	\$5,700.00	\$7,324.79	\$1,647.00a	\$4,600.00
Gross indebtedness	\$5,700.00	\$7,324.79	\$1,647.00a	\$4,600.00
Purposes of creation of indebtedness:				
Current expenses .....	.....	\$400.00	.....	\$4,600.00
Fire and police .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Other public buildings .....	.....	.....	.....	.....
Highways and bridges .....	.....	3,800.00	.....	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers .....	.....	.....	.....	.....
Town deposit and trust funds .....	.....	3,124.79	\$1,647.00	.....
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebted- ness	\$5,700.00	.....	.....	.....
Gross indebtedness	\$5,700.00	\$7,324.79	\$1,647.00a	\$4,600.00
Less sinking fund .....	.....	.....	.....	.....
Net indebtedness	\$5,700.00	\$7,324.79	\$1,647.00a	\$4,600.00
Date of maturity of funded in- debtedness .....	.....	.....	.....	.....
Average interest on indebtedness	5%	4½%	6%	5½%
Average interest on sinking fund .....	.....	.....	.....	.....

a Additional school district indebtedness \$1,200.

INDEBTEDNESS OF FIRE DISTRICTS

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of estimated population

	Manchester South Manchester	Enfield Thompsonville Fire & Sewer	Stonington and Groton Mystic	Stonington Pawcatuck
<i>Estimated population:</i>	12,000	8,500	4,500	4,000
Funded indebtedness:				
Water				
Miscellaneous				
Floating indebtedness			\$17,000.00	\$7,637.50
Gross indebtedness			\$17,000.00	\$7,637.50
Purposes of creation of indebtedness:				
Current expenses				\$4,137.50
Fire and police			\$17,000.00	.....
Schools				
Other public buildings				
Highways and bridges				3,500.00
Parks				
Railroads				
Sewers				
Town deposit and trust funds				
War				
Water				
Other miscellaneous indebted- ness				
Gross indebtedness			\$17,000.00	\$7,637.50
Less sinking fund				
Net indebtedness			\$17,000.00	\$7,637.50
Date of maturity of funded in- debt-ness				
Average interest on indebtedness			5%	6½%
Average interest on sinking fund				

	Windsor	West Hartford Center	New Milford Association	Watertown Oakville
<i>Estimated population:</i>	3,700	3,600	3,000	2,500
Funded indebtedness:				
Water	\$152,000.00	.....	.....	.....
Miscellaneous	25,000.00	.....	.....	.....
Floating indebtedness	5,500.00	.....	\$1,200.00	.....
Gross indebtedness	\$182,500.00	.....	\$1,200.00	.....
Purposes of creation of indebtedness:				
Current expenses .....	.....	.....	.....	.....
Fire and police	3,000.00	.....	.....	.....
Schools .....	.....	.....	.....	.....
Other public buildings .....	.....	.....	.....	.....
Highways and bridges	11,000.00	.....	.....	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers	16,500.00	.....	.....	.....
Town deposit and trust funds .....	.....	.....	.....	.....
War .....	.....	.....	.....	.....
Water	152,000.00	.....	.....	.....
Other miscellaneous indebted- ness .....	.....	.....	\$1,200.00	.....
Gross indebtedness	\$182,500.00	.....	\$1,200.00	.....
Less sinking fund .....	.....	.....	.....	.....
Net indebtedness	\$182,500.00	.....	\$1,200.00	.....
Date of maturity of funded in- debt-ness .....	.....	.....	.....	.....
Average interest on indebtedness	1945 4½%	.....	5%	.....
Average interest on sinking fund .....	.....	.....	.....	.....

INDEBTEDNESS OF FIRE DISTRICTS

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of estimated population

	West Hartford South 2,500	Wethersfield 2,500	Watertown 2,000	Westport 2,000
<i>Estimated population:</i>				
Funded indebtedness:				
Water .....	.....	\$22,000.00	\$90,000.00	.....
Miscellaneous .....	.....	.....	.....	.....
Floating indebtedness	3,000.00	.....	6,850.00	\$26,000.00
Gross indebtedness	\$3,000.00	\$22,000.00	\$96,850.00	\$26,000.00
Purposes of creation of indebtedness:				
Current expenses .....	.....	.....	.....	\$900.00
Fire and police	\$3,000.00	.....	.....	.....
Schools .....	.....	.....	.....	.....
Other public buildings .....	.....	.....	.....	.....
Highways and bridges .....	.....	.....	.....	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers .....	.....	.....	\$6,850.00	25,100.00
Town deposit and trust funds .....	.....	.....	.....	.....
War .....	.....	.....	.....	.....
Water .....	.....	\$22,000.00	\$90,000.00	.....
Other miscellaneous indebted- ness .....	.....	.....	.....	.....
Gross indebtedness	\$3,000.00	\$22,000.00	\$96,850.00	\$26,000.00
Less sinking fund .....	.....	1,035.65	.....	.....
Net indebtedness	\$3,000.00	\$20,964.35	\$96,850.00	\$26,000.00
Date of maturity of funded in- debtedness .....	.....	1941	1947	.....
Average interest on indebtedness	6%	4%	4½%	5%
Average interest on sinking fund .....	.....	4%	.....	.....

	East Hartford East Hartford Meadow 1,800	Farmington Unionville 1,800	West Hartford East Side 1,700	East Hampton 1,800
<i>Estimated population:</i>				
Funded indebtedness:				
Water .....	.....	.....	.....	.....
Miscellaneous .....	.....	.....	.....	.....
Floating indebtedness	\$3,500.00	\$4,500.00	.....	.....
Gross indebtedness	\$3,500.00	\$4,500.00	.....	.....
Purposes of creation of indebtedness:				
Current expenses .....	.....	.....	.....	.....
Fire and police .....	.....	\$4,500.00	.....	.....
Schools .....	.....	.....	.....	.....
Other public buildings .....	.....	.....	.....	.....
Highways and bridges	\$3,500.00	.....	.....	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers .....	.....	.....	.....	.....
Town deposit and trust funds .....	.....	.....	.....	.....
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebted- ness .....	.....	.....	.....	.....
Gross indebtedness	\$3,500.00	\$4,500.00	.....	.....
Less sinking fund .....	.....	.....	.....	.....
Net indebtedness	\$3,500.00	\$4,500.00	.....	.....
Date of maturity of funded in- debtedness	1921	.....	.....	.....
Average interest on indebtedness	6%	6%	.....	.....
Average interest on sinking fund .....	.....	.....	.....	.....

INDEBTEDNESS OF FIRE DISTRICTS

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of estimated population

	Orange Allington 1,500	Glastonbury South 1,500	Suffield 1,500	Orange West Shore 1,200
<i>Estimated population:</i>				
Funded indebtedness:				
Water				
Miscellaneous				
Floating indebtedness		\$300.00	.....	.....
Gross indebtedness		\$300.00	.....	.....
Purposes of creation of indebtedness:				
Current expenses		\$300.00	.....	.....
Fire and police				
Schools				
Other public buildings				
Highways and bridges				
Parks				
Railroads				
Sewers				
Town deposit and trust funds				
War				
Water				
Other miscellaneous indebtedness				
Gross indebtedness		\$300.00	.....	.....
Less sinking fund				
Net indebtedness		\$300.00	.....	.....
Date of maturity of funded indebtedness		1920	.....	.....
Average interest on indebtedness		6%	.....	.....
Average interest on sinking fund				

	North Canaan Canaan 1,000	New Hartford Village 1,000	East Windsor Warehouse Point 1,000	Wethersfield Mill 1,000
<i>Estimated population:</i>				
Funded indebtedness:				
Water .....	.....	.....	.....	\$25,000.00
Miscellaneous	\$10,000.00	.....	.....	.....
Floating indebtedness	700.00	\$500.00	\$1,400.00	10,000.00
Gross indebtedness	\$10,700.00	\$500.00	\$1,400.00	\$45,000.00
Purposes of creation of indebtedness:				
Current expenses .....	.....	\$500.00	.....	.....
Fire and police .....	.....	.....	\$1,400.00	.....
Schools .....	.....	.....	.....	.....
Other public buildings .....	.....	.....	.....	.....
Highways and bridges .....	.....	.....	.....	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers	10,700.00	.....	.....	.....
Town deposit and trust funds .....	.....	.....	.....	.....
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	\$45,000.00
Other miscellaneous indebtedness .....	.....	.....	.....	.....
Gross indebtedness	\$10,700.00	\$500.00	\$1,400.00	\$45,000.00
Less sinking fund .....	.....	.....	.....	.....
Net indebtedness	\$10,700.00	\$500.00	\$1,400.00	\$45,000.00
Date of maturity of funded indebtedness	1927	.....	.....	1934
Average interest on indebtedness	5%	6%	5%	5½%
Average interest on sinking fund .....	.....	.....	.....	.....

INDEBTEDNESS OF FIRE DISTRICTS

As of close of fiscal year ended next prior to October 11, 1920, arranged
in order of estimated population

	Salisbury Lakeville 900	Simsbury Tariffville 850	Enfield Masardville 800	East Haddam Moodus 800
<i>Estimated population:</i>				
Funded indebtedness:				
Water .....	.....	.....	.....	.....
Miscellaneous .....	.....	.....	.....	.....
Floating indebtedness	\$19,750.00	.....	.....	.....
Gross indebtedness	\$19,750.00	.....	.....	.....
Purposes of creation of indebtedness:				
Current expenses .....	.....	.....	.....	.....
Fire and police .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Other public buildings .....	.....	.....	.....	.....
Highways and bridges .....	.....	.....	.....	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers	\$19,750.00	.....	.....	.....
Town deposit and trust funds .....	.....	.....	.....	.....
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebted- ness .....	.....	.....	.....	.....
Gross indebtedness	\$19,750.00	.....	.....	.....
Less sinking fund .....	.....	.....	.....	.....
Net indebtedness	\$19,750.00	.....	.....	.....
Date of maturity of funded in- debtedness .....	.....	.....	.....	.....
Average interest on indebtedness	5%	.....	.....	.....
Average interest on sinking fund .....	.....	.....	.....	.....

	Brooklyn 750	Haddam Miggonum 700	Enfield North Thompsonville 650	Sharon 600
<i>Estimated population:</i>				
Funded indebtedness:				
Water .....	.....	.....	.....	.....
Miscellaneous .....	.....	.....	.....	.....
Floating indebtedness	\$1,850.00	.....	\$500.00	.....
Gross indebtedness	\$1,850.00	.....	\$500.00	.....
Purposes of creation of indebtedness:				
Current expenses	\$1,850.00	.....	.....	.....
Fire and police .....	.....	.....	\$500.00	.....
Schools .....	.....	.....	.....	.....
Other public buildings .....	.....	.....	.....	.....
Highways and bridges .....	.....	.....	.....	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers .....	.....	.....	.....	.....
Town deposit and trust funds .....	.....	.....	.....	.....
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebted- ness .....	.....	.....	.....	.....
Gross indebtedness	\$1,850.00	.....	\$500.00	.....
Less sinking fund .....	.....	.....	.....	.....
Net indebtedness	\$1,850.00	.....	\$500.00	.....
Date of maturity of funded in- debtedness .....	.....	.....	1920	.....
Average interest on indebtedness	5%	.....	6%	.....
Average interest on sinking fund .....	.....	.....	.....	.....

INDEBTEDNESS OF FIRE DISTRICTS

As of close of fiscal year ended next prior to October 11, 1920, arranged in order of estimated population

	Windsor Wilson 535	Enfield No. 1 500	New Hartford Fine Meadow 500	Glastonbury 350
<i>Estimated population:</i>				
Funded indebtedness:				
Water .....	.....	.....	.....	.....
Miscellaneous .....	.....	.....	.....	.....
Floating indebtedness	\$10,629.28	\$200.00	.....	\$2,400.00
Gross indebtedness	\$10,629.28	\$200.00	.....	\$2,400.00
Purposes of creation of indebtedness:				
Current expenses .....	.....	\$200.00	.....	.....
Fire and police .....	.....	.....	.....	\$1,200.00
Schools .....	.....	.....	.....	.....
Other public buildings .....	.....	.....	.....	.....
Highways and bridges .....	.....	.....	.....	\$1,200.00
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers	\$10,629.28	.....	.....	.....
Town deposit and trust funds .....	.....	.....	.....	.....
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebted- ness .....	.....	.....	.....	.....
Gross indebtedness	\$10,629.28	\$200.00	.....	\$2,400.00
Less sinking fund .....	.....	.....	.....	.....
Net indebtedness	\$10,629.28	\$200.00	.....	\$2,400.00
Date of maturity of funded in- debtcdness .....	.....	.....	.....	.....
Average interest on indebtedness	6%	6%	.....	5 1/2%
Average interest on sinking fund .....	.....	.....	.....	.....

	Glastonbury Nauvuc 350	Thompson Number 4 350	Kent 269	Granby Salmon Brook Lighting District 267
<i>Estimated population:</i>				
Funded indebtedness:				
Water				
Miscellaneous				
Floating indebtedness				
Gross indebtedness				
Purposes of creation of indebtedness:				
Current expenses				
Fire and police				
Schools				
Other public buildings				
Highways and bridges				
Parks				
Railroads				
Sewers				
Town deposit and trust funds				
War				
Water				
Other miscellaneous indebted- ness				
Gross indebtedness				
Less sinking fund				
Net indebtedness				
Date of maturity of funded in- debtcdness				
Average interest on indebtedness				
Average interest on sinking fund				

INDEBTEDNESS OF FIRE DISTRICTS

As of close of fiscal year ended next prior to October 11, 1920, arranged in order of estimated population

	Glastonbury Center 245	Ganaan Falls Village 225	Haddam Haddam Center 174	East Haddam 150
<i>Estimated population:</i>				
Funded indebtedness:				
Water .....	.....	.....	.....	.....
Miscellaneous .....	.....	.....	.....	.....
Floating indebtedness	\$500.00	.....	.....	.....
Gross indebtedness	\$500.00	.....	.....	.....
Purposes of creation of indebtedness:				
Current expenses	\$500.00	.....	.....	.....
Fire and police .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Other public buildings .....	.....	.....	.....	.....
Highways and bridges .....	.....	.....	.....	.....
Parks .....	.....	.....	.....	.....
Railroads .....	.....	.....	.....	.....
Sewers .....	.....	.....	.....	.....
Town deposit and trust funds .....	.....	.....	.....	.....
War .....	.....	.....	.....	.....
Water .....	.....	.....	.....	.....
Other miscellaneous indebtedness .....	.....	.....	.....	.....
Gross indebtedness	\$500.00	.....	.....	.....
Less sinking fund .....	.....	.....	.....	.....
Net indebtedness	\$500.00	.....	.....	.....
Date of maturity of funded indebtedness .....	.....	.....	.....	.....
Average interest on indebtedness	6%	.....	.....	.....
Average interest on sinking fund .....	.....	.....	.....	.....

	Glastonbury Addison	Glastonbury Kebron Ave.	Glastonbury Still Hill	Woodbury Oreanaug
<i>Estimated population:</i>				
Funded indebtedness:				
Water				
Miscellaneous				
Floating indebtedness				
Gross indebtedness				
Purposes of creation of indebtedness:				
Current expenses				
Fire and police				
Schools				
Other public buildings				
Highways and bridges				
Parks				
Railroads				
Sewers				
Town deposit and trust funds				
War				
Water				
Other miscellaneous indebtedness				
Gross indebtedness				
Less sinking fund				
Net indebtedness				
Date of maturity of funded indebtedness				
Average interest on indebtedness				
Average interest on sinking fund				

Organized 1919. No operations during first fiscal year.

Has not yet completed fiscal year.

Has not yet completed fiscal year.

Unable to obtain report from Fire District Treasurer.

SUMMARY OF INDEBTEDNESS
OF COUNTIES, CITIES, BOROUGHES, TOWNS, AND FIRE DISTRICTS
As of close of fiscal year ended next prior to October 11, 1920

	Counties	Cities	Boroughs	Towns	Fire Districts	Totals
Funded indebtedness:						
Water		\$10,768,000.00	\$605,000.00	\$296,000.00	\$299,000.00	\$11,958,000.00
Miscellaneous		41,105,000.00	1,522,000.00	14,521,940.00	38,000.00	57,558,940.00
Floating indebtedness		547,000.00	2,205,158.20	1,082,288.12	128,916.73	9,873,960.75
Gross indebtedness		\$922,000.00	\$54,068,158.20	\$3,159,288.12	\$457,916.73	\$79,885,900.75
Purposes of creation of indebtedness:						
Current expenses		\$2,909,227.19	\$408,508.71	\$4,398,299.22	\$8,887.50	\$7,691,422.62
Fire and police		1,597,000.00	10,000.00	10,000.00	30,600.00	11,637,400.00
Schools		8,214,084.94	190,000.00	9,011,287.89	.....	14,415,922.83
Other public buildings		8,462,000.00	.....	2,208,700.00	.....	5,526,700.00
Highways and bridges		12,102,921.81	287,850.00	2,048,878.62	10,200.00	15,678,960.23
Parks		2,408,129.35	.....	50,000.00	.....	2,458,129.35
Railroads		620,000.00	.....	1,184,900.00	.....	1,774,900.00
Sewers		6,886,000.00	579,940.00	1,881,840.00	89,529.28	8,886,209.28
Town deposit and trust funds		34,145.11	.....	408,547.16	.....	442,692.27
War				187,097.00	.....	187,097.00
Water		10,768,000.00	1,182,000.00	804,000.00	809,000.00	12,501,000.00
Municipal lighting plant		586,000.00	30,000.00	.....	.....	616,000.00
Other miscellaneous indebtedness		4,822,000.00	558,089.41	8,802,488.81	1,200.00	9,178,777.72
Gross indebtedness		\$922,000.00	\$54,068,158.20	\$3,159,288.12	\$457,916.73	\$79,885,900.75
Less sinking fund			4,545,191.80	247,185.25	1,161,717.81	1,085,65
Net indebtedness		\$922,000.00	\$49,517,966.40	\$2,912,102.87	\$19,621,820.89	\$78,480,770.74
Total indebtedness of all school districts in towns not under consolidated system as reported, \$4,595,018.48						

TABLE No. 3

Receipts and expenditures of counties, cities, boroughs, towns, and fire districts for the fiscal year ended next prior to October 11, 1920; counties, cities, boroughs, and towns arranged in order of population, 1920 census.

RECEIPTS AND EXPENDITURES OF COUNTIES

For the fiscal year ended next prior to October 11, 1920

	New Haven 415,214	Hartford 338,027	Fairfield 320,936	New London 104,611
<i>Population 1920 census:</i>				
Receipts:				
Local taxes .....	.....	.....	\$182,400.00	\$40,000.00
Labor, sales, etc., of penitentiaries	\$48,069.80	\$18,011.08	3,728.18	1,966.90
Board of prisoners	23,961.14	10,454.54	9,418.01	4,490.59
Roads and bridges .....	.....	.....	.....	1,000.00
Charities	55,125.57	.....	51,027.00	14,996.00
Schools .....	.....	.....	.....	.....
Liquor licenses	21.00	10.00	.....	.....
Fees, fines, forfeits, and penalties	300.00	.....	.....	.....
Temporary and other loans..	.....	549,999.00	.....	4,949.00
Miscellaneous sources	6,787.05	3,519.89	1,561.02	415.48
Total	\$134,214.56	\$581,994.49	\$248,129.21	\$67,817.97
Balance at beginning of year	298,435.74	7,708.51	2,142.79	24,080.06
Grand total	\$432,650.30	\$589,698.00	\$250,272.00	\$91,848.03
Expenditures:				
Salaries of executive officers not included elsewhere.	\$12,688.55	\$11,793.63	\$9,801.95	\$5,185.95
Other general administrative office expenses not included elsewhere	36,545.65	10,030.55	4,139.99	4,103.34
Roads and bridges .....	.....	168,310.94	10.20	.....
Judicial	12,483.77	2,000.00	1,334.50	2,431.74
Charities	10,878.87	8,701.77	6,199.42	4,063.21
Schools .....	.....	.....	.....	.....
Public buildings	14,028.55	192,941.11	30,568.79	.....
Interest .....	.....	3,813.51	15,616.66	3,255.00
County home	70,270.70	21,317.51	99,420.02	10,801.42
County jail	166,744.94	65,792.82	69,072.34	19,395.09
County farm bureau	5,055.00	4,000.00	6,000.00	2,000.00
Sinking Fund .....	.....	.....	7,500.00	.....
Other debt reduction .....	.....	99,999.00	.....	5,000.00
Miscellaneous purposes	33.15	774.77	7,211.94	9,587.17
Total	\$328,729.18	\$587,475.81	\$256,875.81	\$65,822.92
Balance at end of year	103,921.12	2,222.39	6,603.81a	26,025.11
Grand total	\$432,650.30	\$589,698.00	\$250,272.00	\$91,848.03

a Deficit.

RECEIPTS AND EXPENDITURES OF COUNTIES
For the fiscal year ended next prior to October 11, 1920

	Litchfield	Windham	Middlesex	Tolland
<i>Population 1920 census:</i>	76,262	52,815	47,550	27,216
Receipts:				
Local taxes	\$28,486.39	.....	\$19,086.18	\$16,987.51
Labor, sales, etc., of peni- tentiaries	2,895.75	\$2,720.41	8,881.98	702.20
Board of prisoners	2,071.58	2,448.85	1,225.09	.....
Roads and bridges .....	.....	.....	.....	.....
Charities	16,818.00	28,080.16	12,352.59	7,222.89
Schools .....	.....	.....	.....	.....
Liquor licenses	8.00	.....	.....	.....
Fees, fines, forfeits, and penalties .....	.....	.....	484.29	49.72
Temporary and other loans..	.....	28,000.00	.....	.....
Miscellaneous sources	116.73	.....	50.17	800.70
Total	\$44,886.40	\$51,248.92	\$36,530.20	\$25,218.02
Balance at beginning of year	2,957.94a	458.37	6,822.50	10,831.71
Grand total	\$41,428.46	\$51,707.29	\$48,352.70	\$85,544.73
Expenditures:				
Salaries of executive officers not included elsewhere.	\$2,480.80	\$8,551.71	\$4,085.16	.....
Other general administrative office expenses not in- cluded elsewhere	1,023.15	704.22	547.82	.....
Roads and bridges .....	.....	.....	.....	.....
Judicial	2,886.80	1,055.00	8,159.31	.....
Charities	1,668.75	1,445.00	2,699.80	.....
Schools .....	.....	.....	.....	.....
Public buildings .....	.....	.....	.....	.....
Interest .....	.....	823.00	.....	.....
County home	20,566.80	24,590.61	18,117.49	\$9,256.02
County jail	10,129.51	16,021.31	8,129.76	9,274.61
County farm bureau	8,000.00	2,000.00	2,000.00	.....
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction .....	.....	.....	.....	.....
Miscellaneous purposes	4,982.80	9.27	279.81	.....
Total	\$46,182.41	\$50,800.12	\$89,018.65	\$18,580.63
Balance at end of year	4,753.95a	907.17	4,884.05	17,014.10
Grand total	\$41,428.46	\$51,707.29	\$48,352.70	\$85,544.73

a Deficit.

RECEIPTS AND EXPENDITURES OF CITIES

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

	New Haven a	Bridgeport a	Hartford a	Waterbury a
<i>Population 1920 census:</i>	162,537	143,555	188,036	91,715
Receipts:				
Taxes:				
Local sources	\$3,547,039.55	\$4,500,133.70	\$3,863,792.53	\$2,531,453.37
Certain shares of stock ..	71,696.87	20,238.17	810,049.02	14,113.22
Estate penalty	8,919.73	10,178.88	6,317.07	1,895.27
Special street assessments ..	53,023.08	113,204.68	255,177.91	67,098.35
Water works and supply			596,884.39	342,548.39
Roads and bridges	24,513.86	75,719.92		
Charities	42,639.49	38,355.31	11,683.32	7,514.58
Schools	186,831.81	104,255.59	78,861.98	82,204.32
Licenses	37,604.73	21,626.42	83,601.10	10,940.25
Court fines and penalties ...	32,200.46	28,705.82	88,544.96	11,595.87
Temporary and other loans..	1,612,472.00	3,302,293.65	1,042,800.00b	2,510,928.08
Municipal ice plant	25,056.53			
Miscellaneous sources	93,953.41	126,535.39	128,887.72	19,428.05
Total	\$5,735,951.52	\$8,841,247.51	\$6,961,100.00	\$5,599,707.75
Balance at beginning of year	174,671.12	1,112,879.19	502,789.63	541,870.94
Grand total	\$5,910,622.64	\$9,454,126.70	\$7,463,889.63	\$6,141,578.69
Expenditures:				
Salaries	\$58,600.00	\$119,068.98	\$49,715.06	\$106,064.07
Other administrative expenses	114,548.50	86,858.18	112,008.25	214,710.64
Roads and bridges	830,014.09	2,221,974.10	1,110,195.64	1,028,594.51
Judicial	29,303.97	22,932.40	48,542.94	29,853.04
Charities	158,898.25	338,589.51	162,748.36	111,624.13
Schools	1,509,492.96	1,247,291.94	1,521,818.44	1,187,548.05
Police	448,645.90	524,418.51	415,088.35	273,748.82
Recreation	202,595.61	513,178.49	138,587.89	74,088.76
Fire department	366,240.50	614,707.43	454,345.56	299,213.09
Sanitation and health	404,161.11	530,067.25	480,259.93	86,622.09
Public buildings	136,948.18	397,527.98	248,307.28	677,722.00
Water works and supply ...			1,088,410.51	438,773.17c
Taxes	289,579.82	624,692.50	865,631.10	206,226.49
Interest	281,262.11	456,412.75	443,055.32	369,555.02
Sinking Fund	175,000.00	17,000.00	154,220.68	15,000.00
Other debt reduction	755,000.00	938,000.00	25,000.00	810,000.00
Municipal ice plant	44,833.58			
Miscellaneous purposes	51,158.64	46,744.26	57,301.08	1,353.24
Total	\$5,805,633.17	\$8,694,464.28	\$6,874,736.39	\$5,890,697.12
Balance at end of year	104,989.47	759,662.42	589,153.24	290,881.57
Grand total	\$5,910,622.64	\$9,454,126.70	\$7,463,889.63	\$6,141,578.69

a Town and city governments consolidated.

b Includes \$567,800.00 water bonds for new construction.

c \$332,579.31 of this amount expended for capital construction.

RECEIPTS AND EXPENDITURES OF CITIES

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

<i>Population 1920 census:</i>	New Britain a	Stamford	Meriden	Norwalk a
	59,816	85,096	29,867	27,748
Receipts:				
Taxes:				
Local sources	\$1,168,881.57	\$584,864.11	\$282,385.63	\$482,953.63
Certain shares of stock ..	14,861.69	.....	8,188.51	4,538.48
Estate penalty	1,493.99	.....	.....	1,820.85
Special street assessments ..	81,004.82	15,879.30	9,685.96	.....
Water works and supply ...	176,435.70	.....	106,222.81	97,186.85
Roads and bridges	21,158.46	15,000.00	18,280.00	987.49
Charities	9,029.88	.....	615.00	6,258.73
Schools	281,746.62b	.....	.....	20,129.85
Licenses	49,636.29	4,281.80	868.00	.....
Court fines and penalties ...	10,943.75	6,468.54	8,620.01	8,860.99
Temporary and other loans..	171,700.00	550,497.62	817,000.00	108,400.00
Municipal lighting plant ...	.....	.....	.....	144,070.72
Miscellaneous sources	73,228.90	4,015.81	15,686.27	12,432.15
Total	\$1,959,621.17	\$1,180,997.18	\$707,450.19	\$882,184.24
Balance at beginning of year	215,852.52	82,748.27	7,448.88	70,512.47
Grand total	\$2,175,473.69	\$1,213,745.45	\$714,898.52	\$952,646.71
Expenditures:				
Salaries	\$53,425.10	\$12,550.00	\$15,483.32	\$12,500.00
Other administrative expenses	18,254.88	25,520.51	7,796.28	16,063.19
Roads and bridges	281,217.46	180,253.44	66,262.53	87,695.87
Judicial .....	.....	13,007.98	853.89	5,646.05
Charities	60,052.04	.....	.....	29,558.77
Schools	586,170.09	.....	.....	186,092.85
Police	104,266.14	63,005.11	43,841.08	33,884.73
Recreation	19,173.50	22,064.29	5,496.56	1,147.60
Fire department	103,885.48	91,725.93	56,622.16	24,625.37
Sanitation and health	84,245.25	109,097.79	43,276.13	1,800.00
Public buildings	61,715.17	14,000.00	.....	.....
Water works and supply ...	124,052.43	.....	51,329.54	69,436.15
Taxes	96,211.44	.....	.....	55,486.80
Interest	82,223.97	49,127.21	22,300.07	94,468.36
Sinking Fund	49,000.00	21,592.47	.....	28,368.00
Other debt reduction	80,000.00	548,000.00	368,750.00	123,000.00
Municipal lighting plant ...	.....	.....	.....	137,068.44
Miscellaneous purposes	79,857.49	16,693.15	883.47	11,827.85
Total	\$1,833,250.44	\$1,161,637.88	\$682,895.03	\$918,570.03
Balance at end of year	842,223.25	52,107.57	82,508.49	84,076.68
Grand total	\$2,175,473.69	\$1,213,745.45	\$714,898.52	\$952,646.71

a Town and city governments consolidated.

b Includes \$180,672.00 received from sale of bonds.

QUADRENNIAL REPORT

RECEIPTS AND EXPENDITURES OF CITIES

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

<i>Population 1920 census:</i>	New London a 25,688	Norwich 22,804	Bristol a 20,620	Danbury 18,943
Receipts:				
Taxes:				
Local sources	\$795,835.62	\$244,555.55	\$343,371.65	\$220,694.62
Certain shares of stock ..	13,709.71	2,524.83	7,722.57	.....
Estate penalty	918.68	.....	108.86	.....
Special street assessments ..	13,869.89	26,989.65	9,148.86	.....
Water works and supply ...	99,076.42	57,788.84	79,106.43	58,871.66
Roads and bridges	1,885.85	10,000.00	2,569.08	4,942.14
Charities	6,140.63	7,745.75	3,161.99	.....
Schools	13,937.70	.....	11,101.81	.....
Licenses	8,759.12	911.75	12,410.91	148.40
Court fines and penalties ...	3,125.86	5,008.15	8,935.53	2,798.21
Temporary and other loans..	921,182.81	205,200.00	405,300.00	335,247.00
Municipal lighting plant ...	.....	451,200.00	.....	.....
Miscellaneous sources	21,646.26	6,661.84	32,028.17	89,134.69b
Total	\$1,893,488.05	\$1,018,580.36	\$914,965.86	\$709,338.72
Balance at beginning of year	150,908.75	18,082.82	32,028.17	38,858.30
Grand total	\$2,044,396.80	\$1,036,613.18	\$938,461.27	\$748,695.02
Expenditures:				
Salaries	\$31,902.87	\$7,552.00	\$9,381.72	\$10,848.96
Other administrative expenses	18,457.86	15,376.16	24,288.36	7,517.52
Roads and bridges	175,701.41	148,005.94	155,596.67	97,980.05
Judicial	2,735.00	18,199.56	7,191.99	8,550.00
Charities	56,148.83	.....	17,926.96	.....
Schools	244,000.00	.....	107,970.81	.....
Police	82,864.27	43,974.93	21,975.11	37,493.48
Recreation	14,500.00	8,618.09	8,734.68	250.00
Fire department	58,302.09	50,244.07	14,207.96	26,148.82
Sanitation and health	78,847.26	21,771.10	11,947.77	638.80
Public buildings	87,644.05	.....	.....	3,018.75
Water works and supply ...	204,520.49c	.....	100,000.00d	28,337.98
Taxes	50,578.81	.....	31,976.69	.....
Interest	78,995.15	97,478.78	24,090.41	27,817.57
Sinking Fund	16,000.00	.....	7,800.00	42,797.08
Other debt reduction	516,000.00	191,500.00	350,300.00	320,999.00
Municipal lighting plant ...	.....	404,762.43	.....	.....
Miscellaneous purposes	40,306.17	14,899.80	26,577.40	3,850.00
Total	\$1,757,499.28	\$1,016,872.86	\$919,466.51	\$611,748.51
Balance at end of year	286,897.54e	19,740.32	18,994.76	136,946.51
Grand total	\$2,044,396.80	\$1,036,613.18	\$938,461.27	\$748,695.02

a Town and city governments consolidated.

b Includes \$85,000 received from sinking fund for retirement of bonds.

c Includes \$159,319.24 spent for new construction.

d \$51,840.80 of this amount used in extension of plant and equipment.

e Includes \$88,781.89 balance water department and \$184,334.94 to be used for construction Junior High School building.

RECEIPTS AND EXPENDITURES OF CITIES

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

<i>Population 1920 census:</i>	Ansonia a 17,643	Middletown 18,638	Willimantic 12,880	Derby a 11,288
Receipts:				
Taxes:				
Local sources	\$404,676.63	\$103,656.20	\$120,497.10	\$152,879.46
Certain shares of stock ..	7,495.68	5,075.68	976.10	4,473.79
Estate penalty	112.00	.....	.....	402.97
Special street assessments ..	1,955.21	12,488.62	.....	3,057.52
Water works and supply ....	.....	50,474.48	31,915.20	.....
Roads and bridges' .....	.....	.....	8,382.74	66.00
Charities	3,596.96	.....	.....	5,682.24
Schools	18,686.48	.....	.....	7,449.80
Licenses	1,718.19	540.00	505.60	18,799.86
Court fines and penalties ...	.....	3,112.01	1,982.10	4,198.23
Temporary and other loans..	.....	23,000.00	55,005.00	16,247.83
Municipal ice plant .....	.....	.....	4,164.62	.....
Miscellaneous sources	1,968.76	1,337.97	512.39	10,588.82
Total	\$440,209.86	\$199,684.96	\$218,040.85	\$223,795.52
Balance at beginning of year	18,580.80	4,858.10	5,739.87	4,279.25
Grand total	\$453,740.16	\$204,543.06	\$223,780.72	\$228,074.77
Expenditures:				
Salaries	\$11,530.56	\$3,650.00	\$3,671.00	\$11,281.00
Other administrative expenses	2,709.26	4,422.97	4,271.59	5,978.90
Roads and bridges	64,640.51	60,471.17	48,979.45	44,464.19
Judicial	1,748.68	5,657.87	1,965.25	1,127.86
Charities	81,899.22	.....	.....	12,236.48
Schools	201,806.41	.....	.....	69,755.88
Police	22,274.91	15,759.00	12,351.93	9,136.31
Recreation	200.00	123.15	205.60	820.29
Fire department	11,494.62	16,591.85	16,557.08	6,756.49
Sanitation and health	5,088.30	3,828.32	1,255.13	7,289.44
Public buildings	12,304.47	22,578.22	.....	7,245.54
Water works and supply ...	.....	21,330.11	19,937.52	.....
Taxes	19,550.28	.....	.....	6,924.88
Interest	23,792.44	17,122.21	13,672.18	11,542.50
Sinking Fund	19,000.00	10,572.50	3,692.76	2,000.00
Other debt reduction .....	.....	13,000.00	55,005.00	12,000.00
Municipal ice plant .....	.....	.....	8,103.91	.....
Miscellaneous purposes	3,445.79	552.50	608.15	5,254.70
Total	\$431,480.40	\$195,659.87	\$190,276.50	\$213,818.81
Balance at end of year	22,259.76	8,883.19	33,504.22	14,260.96
Grand total	\$453,740.16	\$204,543.06	\$223,780.72	\$228,074.77

a Town and city governments consolidated.

RECEIPTS AND EXPENDITURES OF CITIES

For fiscal year ended next prior to October 11, 1920, arranged in order
of population—1920 census

<i>Population 1920 census:</i>	Shelton a 9,475	Rockville 7,726	Putnam 7,711
Receipts:			
Taxes:			
Local sources	\$187,349.78	\$75,000.00	\$41,302.43
Certain shares of stock	1,562.99	14,522.00	626.65
Estate penalty	559.94	.....	.....
Special street assessments	3,834.10	1,663.35	10,108.99
Water works and supply .....	.....	.....	40,280.27
Roads and bridges .....	.....	8,000.00	1,687.57
Charities	884.38	.....	.....
Schools	5,473.41	.....	.....
Licenses	1,215.29	773.93	543.00
Court fines and penalties	2,124.23	745.53	1,281.42
Temporary and other loans	190,000.00	70,000.00	35,000.00
Miscellaneous sources	900.87	.....	311.95
Total	\$378,904.99	\$170,704.81	\$181,142.28
Balance at beginning of year	86,408.75	5,257.50	14,014.70
Grand total	\$460,313.74	\$175,962.31	\$145,156.98
Expenditures:			
Salaries	\$3,733.30	\$1,264.33	\$1,740.06
Other administrative expenses	5,098.53	1,931.03	3,400.24
Roads and bridges	60,143.82	47,745.70	31,631.10
Judicial	1,849.19	1,400.00	1,846.36
Charities	6,091.31	.....	.....
Schools	68,254.51	.....	.....
Police	3,737.29	7,521.14	6,680.43
Recreation	1,250.00	1,219.32	.....
Fire department	4,962.82	6,729.45	5,945.38
Sanitation and health	3,717.35	3,757.81	913.15
Public buildings	4,783.91	.....	.....
Water works and supply .....	.....	2,320.00	33,123.25
Taxes	14,202.39	.....	.....
Interest	15,484.81	8,753.34	13,584.70
Sinking Fund	5,000.00	3,142.36	12,000.00
Other debt reduction	7,000.00	85,000.00	27,500.00
Miscellaneous purposes	3,977.24	1,312.40	1,455.24
Total	\$209,286.47	\$172,096.93	\$144,824.91
Balance at end of year	251,027.27	8,865.38	332.07
Grand total	\$460,313.74	\$175,962.31	\$145,156.98

a Town and city governments consolidated.

RECEIPTS AND EXPENDITURES OF BOROUGH

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

	Torrington 20,623	Naugatuck a 15,051	Wallingford 9,648	East Hartford b 8,000c
Population 1920 census:				
Receipts:				
Taxes:				
Local sources	\$191,334.19	\$237,384.71	\$45,230.54	\$23,098.85
Certain shares of stock ..	5,015.56	5,731.75	433.88	1,675.22
Estate penalty		15.20		
Special street assessments ..	12,831.67	2,829.25	7,575.73	8,621.47
Water works and supply ...			3,000.00	55,049.67
Roads and bridges	8,500.00	2,723.56		8,503.12
Charities		16,160.08		
Schools		12,593.05		
Licenses	290.75	1,217.51		268.00
Court fines and penalties ...	1,499.91	1,986.70	1,732.84	
Temporary and other loans..	186,106.75	130,000.00	160,000.00	442,000.00
Miscellaneous sources	8,475.48	1,263.65	3,636.79	857.11
Borough electric works			3,000.00	
Total	\$409,054.31	\$411,905.46	\$224,609.08	\$535,072.94
Balance at beginning of year	24,764.86	719.81	111.53	12,706.14
Grand total	\$433,818.67	\$412,625.27	\$224,720.61	\$547,779.08
Expenditures:				
Salaries	\$6,038.65	\$3,550.00	\$2,280.42	\$1,237.85
Other administrative expenses	599.08	4,213.89	1,225.59	1,060.09
Roads and bridges	105,653.88	35,084.27	22,872.85	26,086.64
Judicial	821.84	297.59	984.90	
Charities		52,260.70		
Schools		107,244.84		
Police	24,835.75	16,187.32	6,574.97	
Recreation		1,429.79	850.00	11,000.00
Fire department	26,960.97	14,762.19	5,350.89	7,022.55
Sanitation and health	81,522.05	13,721.30	1,958.68	1,092.48
Public buildings			74.96	
Water works and supply ...			211.50	145,355.43
Taxes		19,105.22		
Interest	18,426.82	7,928.94	19,806.06	25,158.22
Sinking Fund	9,263.37		3,400.00	
Other debt reduction	203,805.23	120,000.00	156,800.00	94,000.00
Miscellaneous purposes	7,077.96	13,084.23	2,194.76	1,837.94
Total	\$485,005.60	\$409,420.29	\$224,035.58	\$313,850.70
Balance at end of year ...	1,186.98d	3,204.99	685.03	233,928.38
Grand total	\$433,818.67	\$412,625.27	\$224,720.61	\$547,779.08

a Town and borough governments consolidated.

b East Hartford fire district has all powers of a borough.

c Estimated population.

d Deficit.

RECEIPTS AND EXPENDITURES OF BOROUGHES
For fiscal year ended next prior to October 11, 1920, arranged in order
of population—1920 census

	Greenwich	Southington	Groton	Stafford Springs
<i>Population 1920 census:</i>	5,939	5,085	4,286	2,883
Receipts:				
Taxes:				
Local sources	\$79,116.51	\$39,702.64	\$611.50	\$15,915.69
Certain shares of stock ..	.....	654.41	814.19	1,421.51
Estate penalty .....	.....	.....	.....	.....
Special street assessments ..	1,127.29	5,827.11	7,500.00	.....
Water works and supply ...	.....	.....	5,000.00	.....
Roads and bridges	18,484.90	2,798.16	.....	2,800.00
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Licenses	200.00	259.25	74.90	84.00
Court fines and penalties ...	1,864.73	.....	660.00	.....
Temporary and other loans..	151,188.75	4,000.00	.....	6,000.00
Miscellaneous sources	6,451.40	1,158.92	98.61	531.08
Total	\$257,933.58	\$54,395.49	\$14,274.10	\$26,722.23
Balance at beginning of year	20,973.80	4,215.08	10,073.44	248.16
Grand total	\$278,007.38	\$58,610.57	\$24,347.54	\$26,965.39
Expenditures:				
Salaries	\$3,325.00	\$300.00	\$200.00	\$424.45
Other administrative expenses	2,159.90	260.79	168.55	606.73
Roads and bridges	71,855.15	13,706.36	7,423.11	11,485.27
Judicial .....	.....	.....	.....	40.00
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Police	20,523.78	1,405.90	2,979.28	1,561.95
Recreation .....	.....	.....	.....	.....
Fire department	9,996.73	518.31	2,444.49	1,556.25
Sanitation and health	1,779.96	3,843.54	2,668.53	56.80
Public buildings .....	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	1,140.00
Taxes .....	.....	.....	.....	.....
Interest	14,880.00	6,030.32	.....	599.34
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction	10,000.00	9,455.00	6,000.00	6,000.00
Miscellaneous purposes	420.41	440.95	674.31	304.97
Total	\$134,740.98	\$35,461.17	\$22,558.27	\$23,674.36
Balance at end of year	143,266.45	23,149.40	1,789.27	3,291.03
Grand total	\$278,007.38	\$58,610.57	\$24,347.54	\$26,965.39

RECEIPTS AND EXPENDITURES OF BOROUGHES

For fiscal year ended next prior to October 11, 1920, arranged in order
of population—1920 census

	Jewett City 8,196	Danielson 3,130	Branford 2,619	Stonington 2,100
<i>Population 1920 census:</i>				
Receipts:				
Taxes:				
Local sources	\$9,297.24	\$14,274.54	\$4,108.15	\$7,327.02
Certain shares of stock ..	283.54	283.94	.....	239.08
Estate penalty .....	.....	.....	.....	.....
Special street assessments ..	1,600.00	2,033.44	351.98	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	.....	.....	2,000.00
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Licenses	188.75	180.00	41.25	20.00
Court fines and penalties ...	.....	101.29	.....	.....
Temporary and other loans..	500.00	12,000.00	.....	1,341.32
Miscellaneous sources	211.05	4,253.56	9.82	858.33
Municipal electric lighting plant	9,958.01	.....	.....	.....
Total	\$21,938.59	\$33,076.77	\$4,511.20	\$11,785.75
Balance at beginning of year	651.67	2,864.73	1,057.84	908.63
Grand total	\$22,590.26	\$35,941.50	\$5,569.04	\$12,694.38
Expenditures:				
Salaries	\$179.62	\$175.00	\$50.00	\$130.10
Other administrative expenses	315.60	155.85	155.00	361.06
Roads and bridges	4,028.38	4,074.16	3,787.45	4,285.37
Judicial .....	.....	48.00	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Police	1,206.68	2,907.31	.....	74.00
Recreation	29.21	279.25	.....	668.36
Fire department	3,245.83	13,477.87	.....	1,527.53
Sanitation and health	460.79	57.50	.....	60.00
Public buildings .....	.....	1,563.59	.....	1,075.62
Water works and supply ...	.....	1,624.00	.....	1,376.28
Taxes .....	.....	.....	.....	.....
Interest	3,547.50	3,246.96	.....	947.37
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction	500.00	7,500.00	.....	1,435.32
Miscellaneous purposes	284.72	215.61	788.30	.....
Municipal electric lighting plant	7,788.72	.....	.....	.....
Total	\$21,587.05	\$35,324.90	\$4,780.75	\$11,941.51
Balance at end of year	1,003.21	616.60	788.29	747.87
Grand total	\$22,590.26	\$35,941.50	\$5,569.04	\$12,689.38

RECEIPTS AND EXPENDITURES OF BOROUGHES

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

	New Canaan 1,918	Guilford 1,612	Bridgfield 1,030	Farmington 1,021
<i>Population 1920 census:</i>				
Receipts:				
Taxes:				
Local sources	\$19,070.41	\$5,845.61	\$12,475.42	\$4,717.65
Certain shares of stock ..	.....	.....	.....	1,938.32
Estate penalty .....	.....	.....	.....	.....
Special street assessments ..	5,848.21	.....	.....	12.46
Water works and supply ...	.....	.....	.....	5.26
Roads and bridges	3,896.00	800.00	1,500.00	2,417.75
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Licenses	33.00	842.50	10.00	.....
Court fines and penalties ...	54.38	.....	.....	.....
Temporary and other loans..	9,000.00	3,200.00	26,602.08	.....
Miscellaneous sources	88.00	51.33	65.17	2,108.84
Total	\$37,490.00	\$10,239.44	\$40,652.67	\$11,200.28
Balance at beginning of year	3,954.07	251.38	2,126.15	116.72
Grand total	\$41,444.07	\$10,490.82	\$42,778.82	\$11,317.00
Expenditures:				
Salaries	\$1,104.60	\$64.78	\$625.00	\$225.00
Other administrative expenses	334.24	135.96	302.39	205.29
Roads and bridges	21,931.76	3,197.60	3,561.59	6,068.79
Judicial .....	.....	.....	100.00	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Police	4,553.30	90.00	780.00	91.60
Recreation .....	.....	.....	.....	1,013.00
Fire department	2,005.00	2,108.29	5,885.00	1,841.04
Sanitation and health .....	.....	.....	21,243.19	.....
Public buildings .....	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	615.00
Taxes .....	.....	.....	.....	.....
Interest	4,034.00	315.16	3,386.92	391.15
Sinking Fund .....	.....	.....	1,000.00	.....
Other debt reduction	3,000.00	3,800.00	3,000.00	.....
Miscellaneous purposes	5.80	570.60	249.99	90.90
Total	\$36,968.20	\$10,282.39	\$39,634.08	\$11,141.07
Balance at end of year	4,475.87	208.43	3,144.74	175.93
Grand total	\$41,444.07	\$10,490.82	\$42,778.82	\$11,317.00

RECEIPTS AND EXPENDITURES OF BOROUGHES

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

<i>Population 1920 census:</i>	Colchester 918	Litchfield 707	Bantam 608	Newtown 426
Receipts:				
Taxes:				
Local sources	\$1,789.82	\$8,460.90	\$802.87	\$2,228.99
Certain shares of stock ..	100.75	864.68	7.82	.....
Estate penalty .....	.....	.....	.....	.....
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	64.00	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Licenses	3.00	.....	10.00	.....
Court fines and penalties ...	.....	.....	.....	.....
Temporary and other loans..	.....	.....	.....	.....
Miscellaneous sources	88.90	18.00	547.57	.....
Total	\$1,877.47	\$8,902.58	\$1,868.26	\$2,228.99
Balance at beginning of year	185.28	1,884.91	781.46	310.67
Grand total	\$2,012.75	\$10,287.49	\$2,149.72	\$2,539.66
Expenditures:				
Salaries	\$60.00	\$175.00	\$40.94	\$42.00
Other administrative expenses	105.25	166.89	466.87	107.12
Roads and bridges	1,385.65	8,083.18	410.96	716.50
Judicial .....	.....	.....	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Police .....	.....	13.00	.....	.....
Recreation	28.00	253.90	.....	.....
Fire department	41.34	729.09	.....	1,225.50
Sanitation and health .....	.....	328.65	.....	.....
Public buildings .....	.....	.....	.....	.....
Water works and supply ...	.....	960.00	.....	.....
Taxes .....	.....	.....	.....	.....
Interest .....	.....	1,185.64	.....	.....
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction .....	.....	1,000.00	.....	.....
Miscellaneous purposes	24.50	.....	.....	.....
Total	\$1,644.74	\$7,894.85	\$918.77	\$2,091.12
Balance at end of year	368.01	2,392.64	1,230.95	448.54
Grand total	\$2,012.75	\$10,287.49	\$2,149.72	\$2,539.66

RECEIPTS AND EXPENDITURES OF BOROUGH

For fiscal year ended next prior to October 11, 1920, arranged in order
of population—1920 census

<i>Population 1920 census:</i>	Woodmont 220	Fenwick 150
Receipts:		
Taxes:		
Local sources	\$8,459.94	\$6,337.76
Certain shares of stock .....	.....	.....
Estate penalty .....	.....	.....
Special street assessments	84.00	.....
Water works and supply .....	.....	.....
Roads and bridges .....	.....	.....
Charities .....	.....	.....
Schools .....	.....	.....
Licenses .....	.....	.....
Court fines and penalties .....	.....	.....
Temporary and other loans	2,492.23	2,500.00
Miscellaneous sources	6,652.79a	200.00
Total	\$12,688.96	\$9,037.76
Balance at beginning of year	199.90	.....
Grand total	\$12,888.86	\$9,037.76
Expenditures:		
Salaries	\$491.00	.....
Other administrative expenses .....	.....	\$22.50
Roads and bridges	4,064.08	2,977.53
Judicial .....	.....	.....
Charities .....	.....	.....
Schools .....	.....	.....
Police .....	.....	.....
Recreation .....	.....	1,519.83
Fire department	2,172.55	.....
Sanitation and health	2,234.00	400.00
Public buildings .....	.....	.....
Water works and supply .....	.....	.....
Taxes .....	.....	.....
Interest .....	.....	245.34
Sinking Fund .....	.....	.....
Other debt reduction	2,500.00	3,300.00
Miscellaneous purposes	755.72	408.97
Total	\$12,817.35	\$8,874.17
Balance at end of year	71.51	163.59
Grand total	\$12,888.86	\$9,037.76

a \$6,637.09 of this amount received from Town of Milford.

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

	Stamford 40,067	Meriden 34,764	Norwich 29,685	Danbury 22,325
<i>Population 1920 census:</i>				
Receipts:				
Taxes:				
Local sources	\$810,861.07	\$498,019.59	\$336,124.67	\$347,029.50
Certain shares of stock ..	4,416.70	6,630.29	5,323.36	3,008.37
Estate penalty	13,480.89	386.72	1,969.08	364.25
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges	28.30	.....	290.24	101.20
Charities	7,425.56	.....	3,934.47	3,250.89
Schools	41,033.30	20,167.09	16,878.05	13,859.49
Licenses	2,049.28	2,159.50	8,952.25	2,537.50
Court fines and penalties ...	.....	.....	.....	.....
Temporary and other loans..	850,000.00	255,000.00	163,000.00	264,500.00
Miscellaneous sources	1,487.57	10,834.58	780.87	984.77
Total	\$1,730,782.67	\$793,197.77	\$532,202.94	\$635,635.97
Balance at beginning of year	625.88	55,787.74	50,092.74	2,321.30
Grand total	\$1,731,408.55	\$848,985.51	\$582,295.68	\$637,957.27
Expenditures:				
Salaries	\$16,358.31	\$12,827.50	\$8,939.00	\$7,334.00
Other administrative expenses	21,220.37	19,364.90	12,514.51	18,321.38
Roads and bridges	66,458.59	35,238.35	81,746.65	44,195.08
Judicial .....	.....	171.37	.....	1,457.76
Charities	49,118.87	87,891.33	33,265.92	35,516.73
Schools	449,695.22	383,190.84	199,596.33	195,721.53
Police	678.00	.....	.....	.....
Recreation	3,710.42	.....	.....	300.00
Fire department	1,959.07	80.65	421.50	.....
Sanitation and health	419.36	.....	2,346.69	294.30
Public buildings	123,105.00	.....	.....	10,058.25
Water works and supply ...	.....	.....	.....	.....
Taxes	109,449.73	53,042.97	46,244.69	40,406.15
Interest	84,183.60	27,749.53	9,911.75	21,449.48
Sinking Fund	13,455.00	.....	.....	10,000.00
Other debt reduction	776,000.00	265,000.00	163,000.00	234,000.00
Miscellaneous purposes	8,407.80	10,527.85	7,299.82	16,478.84
Total	\$1,724,219.34	\$845,035.29	\$565,286.86	\$635,533.50
Balance at end of year	7,189.21	3,950.22	17,008.82	2,423.77
Grand total	\$1,731,408.55	\$848,985.51	\$582,295.68	\$637,957.27

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

	Middletown 22,129	Greenwich 22,123	Torrington 22,055	Manchester 18,370
<i>Population 1920 census:</i>				
Receipts:				
Taxes:				
Local sources	\$269,195.92	\$339,758.63	\$523,163.51	\$364,190.31
Certain shares of stock ..	2,185.33	7,874.23	6,121.84	16,010.87
Estate penalty	54.20	20,209.18	523.59	1,151.69
Special street assessments ..	.....	75,630.64	.....	85.72
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	14,383.50	68.50	521.50
Charities	740.77	5,704.79	3,490.58	1,830.41
Schools	7,954.40	14,468.65	27,635.95	4,845.48
Licenses	1,020.90	3,562.43	1,104.59	2,663.59
Court fines and penalties ...	.....	3,792.93	2,865.16	.....
Temporary and other loans..	151,000.00	1,269,337.00	275,000.00	310,000.00
Miscellaneous sources	7,935.70	16,464.74	2,628.20	7,152.55
Total	\$440,087.22	\$2,271,186.72	\$847,601.92	\$708,452.11
Balance at beginning of year	5,380.95	230,456.86	6,689.82	11,430.66
Grand total	\$445,468.17	\$2,501,643.08	\$854,291.74	\$719,882.77
Expenditures:				
Salaries	\$10,380.76	\$16,728.85	\$8,800.00	\$5,560.00
Other administrative expenses	6,099.12	24,195.04	20,700.68	15,357.55
Roads and bridges	20,358.51	249,954.53	33,938.37	75,935.34
Judicial	1,646.18	8,954.03	3,872.46	4,434.21
Charities	28,905.59	61,271.87	34,142.92	16,072.34
Schools	115,814.15	275,879.12	387,086.60	210,908.33
Police	1,317.75	11,974.87	.....	13,543.02
Recreation .....	.....	71,770.28	9,676.60	3,678.96
Fire department .....	.....	17,096.89	.....	184.45
Sanitation and health	900.18	22,576.88	.....	3,993.25
Public buildings	7,735.25	46,197.90	.....	3,697.32
Water works and supply ...	.....	.....	.....	.....
Taxes	42,103.20	70,545.29	81,327.17	27,526.53
Interest	32,726.42	94,889.92	43,507.02	8,191.23
Sinking Fund	10,000.00	.....	6,000.00	.....
Other debt reduction	155,000.00	1,500,800.00	200,000.00	320,000.00
Miscellaneous purposes	3,892.38	5,643.60	4,203.48	10,161.53
Total	\$436,879.49	\$2,478,278.57	\$783,205.30	\$719,557.34
Balance at end of year ...	8,588.68	23,364.51	71,086.44	323.43
Grand total	\$445,468.17	\$2,501,643.08	\$854,291.74	\$719,882.77

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

	Orange 16,614	Windham 13,801	Stratford 12,347	Wallingford 12,010
<i>Population 1920 census:</i>				
Receipts:				
Taxes:				
Local sources	\$253,683.82	\$160,206.22	\$278,196.92	\$230,494.39
Certain shares of stock ..	1,757.86	4,899.69	1,819.31	1,421.10
Estate penalty	303.70	279.49	2,470.00	64.84
Special street assessments ..	6,010.92	.....	7,849.37	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges	1,580.55	.....	738.83	.....
Charities	1,919.00	91.51	1,018.89	.....
Schools	9,768.80	23,344.03	10,829.29	16,645.34
Licenses	6,617.94	805.08	2,331.12	1,341.42
Court fines and penalties ...	8,632.91	.....	1,972.82	.....
Temporary and other loans..	63,000.00	94,900.00	816,107.78	85,000.00
Miscellaneous sources	3,247.51	6,917.82	7,108.06	7,721.89
Total	\$356,523.01	\$291,443.84	\$1,129,482.34	\$842,688.98
Balance at beginning of year	101,124.90	1,034.60	37,638.12	1,657.45
Grand total	\$457,647.91	\$292,478.44	\$1,166,770.46	\$844,346.43
Expenditures:				
Salaries	\$8,296.77	\$2,800.00	\$8,837.10	\$5,012.83
Other administrative expenses	11,683.75	11,950.82	6,827.72	6,029.63
Roads and bridges	51,639.96	9,538.77	281,775.11	12,249.04
Judicial	11,092.02	.....	2,249.50	485.90
Charities	9,919.32	18,237.85	11,098.86	12,480.70
Schools	112,290.40	107,536.38	130,945.24	127,102.08
Police	16,877.80	.....	10,604.62	.....
Recreation	3,632.65	.....	1,282.93	1,150.00
Fire department	13,512.55	133.99	4,984.92	71.05
Sanitation and health	81,163.41	193.00	.....	.....
Public buildings	3,581.30	2,093.50	58,081.86	20,478.99
Water works and supply ...	.....	.....	3,000.00	.....
Taxes	17,824.23	16,236.32	16,094.29	14,586.07
Interest	22,410.00	28,003.57	23,761.15	26,299.64
Sinking Fund	12,481.00	.....	.....	2,000.00
Other debt reduction	16,500.00	69,899.78	330,000.00	80,000.00
Miscellaneous purposes	6,441.03	8,025.29	4,220.32	1,971.87
Total	\$399,346.19	\$274,649.27	\$893,713.62	\$809,917.80
Balance at end of year	58,301.72	17,829.17	273,056.84	34,428.63
Grand total	\$457,647.91	\$292,478.44	\$1,166,770.46	\$844,346.43

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

<i>Population 1920 census:</i>	Enfield 11,719	East Hartford 11,648	Fairfield 11,475	Stonington 10,236
Receipts:				
Taxes:				
Local sources	\$191,079.81	\$201,221.76	\$212,962.90	\$137,458.25
Certain shares of stock ..	6,655.05	5,632.23	911.85	3,917.43
Estate penalty	690.87	91.86	736.26	1,546.16
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges	630.10	.....	69.00	719.27
Charities	2,134.86	1,702.81	943.83	178.29
Schools	13,188.85	11,458.42	9,270.36	11,217.05
Licenses	1,524.43	1,271.18	2,271.73	1,785.21
Court fines and penalties ...	3,403.33	6,421.27	2,008.32	121.92
Temporary and other loans..	93,000.00	209,600.00	160,000.00	51,050.00
Miscellaneous sources	576.81	943.23	997.69	1,999.03
Total	\$312,884.11	\$438,342.76	\$390,171.94	\$209,992.61
Balance at beginning of year	7,670.38	4,408.06	2,088.58a	59,950.11
Grand total	\$320,554.49	\$442,750.82	\$388,083.36	\$269,972.72
Expenditures:				
Salaries	\$6,527.10	\$5,568.88	\$7,746.43	\$2,190.94
Other administrative expenses	140.00	4,555.96	2,744.47	6,826.24
Roads and bridges	37,574.59	24,551.07	46,315.57	15,871.33
Judicial	2,879.22	3,476.88	1,432.09	2,340.87
Charities	12,058.64	8,217.09	12,089.57	10,415.81
Schools	98,000.00	110,119.78	106,642.21	92,072.49
Police	7,531.78	9,098.17	2,299.55	3,676.73
Recreation	253.00	.....	250.00	73.13
Fire department .....	.....	.....	946.28	7.20
Sanitation and health	1,751.30	271.50	1,293.15	832.21
Public buildings	2,000.00	40,530.40	5,349.59	1,152.97
Water works and supply ...	3,974.36	.....	.....	.....
Taxes	9,402.70	13,029.12	12,913.91	14,003.88
Interest	12,749.62	22,160.97	20,763.13	15,027.49
Sinking Fund	10,000.00	12,000.00	8,520.10	.....
Other debt reduction	93,000.00	179,600.00	157,500.00	52,495.00
Miscellaneous purposes	10,601.50	3,433.97	2,373.62	1,773.22
Total	\$308,443.81	\$436,613.79	\$389,170.97	\$218,759.56
Balance at end of year	12,110.68	6,137.03	1,096.61a	51,213.16
Grand total	\$320,554.49	\$442,750.82	\$388,083.36	\$269,972.72
a Deficit.				

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

<i>Population 1920 census:</i>	Milford 10,193	Groton 9,227	Winchester 9,019	Vernon 8,898
Receipts:				
Taxes:				
Local sources	\$251,260.09	\$99,358.56	\$191,507.87	\$114,956.07
Certain shares of stock ..	1,904.53	2,529.76	6,619.78	33,267.81
Estate penalty	503.38	50.38	212.44	50.49
Special street assessments ..	.....	311.90	.....	.....
Water works and supply ...	.....	.....	24,424.22	.....
Roads and bridges .....	.....	2,189.01	478.91	.....
Charities .....	.....	7,111.07	2,255.62	1,261.12
Schools	5,553.15	10,417.03	7,889.73	13,970.08
Licenses	4,236.29	569.32	562.31	1,369.69
Court fines and penalties ...	2,194.59	3,751.52	959.16	.....
Temporary and other loans..	70,000.00	87,500.00	75,000.00	94,800.00
Miscellaneous sources	5,562.66	12,389.18	2,370.01	6,061.07
Total	\$341,214.69	\$226,177.73	\$312,280.05	\$265,736.38
Balance at beginning of year	128,216.98	10,320.30	362.28	6,856.82a
Grand total	\$469,431.67	\$236,498.03	\$312,642.33	\$258,879.71
Expenditures:				
Salaries	\$8,116.19	\$5,905.81	\$13,421.09	b
Other administrative expenses	16,636.04	12,663.61	1,214.37	\$11,468.57
Roads and bridges	79,925.27	32,176.28	37,392.33	12,250.81
Judicial	3,472.28	1,434.43	1,179.83	.....
Charities	4,363.58	9,994.11	10,344.86	17,189.70
Schools	76,710.00	52,896.44	57,971.93	80,892.17
Police	19,479.63	2,912.00	5,283.57	.....
Recreation	2,299.61	1.00	566.55	.....
Fire department	29,627.67	6,052.67	19,662.01	.....
Sanitation and health	3,242.17	594.10	168.28	.....
Public buildings	24,893.78	2,177.52	5,896.60	6,426.34
Water works and supply ...	4,383.42	.....	3,240.59	.....
Taxes	15,517.43	9,510.36	13,092.59	21,512.99
Interest	21,191.76	19,407.44	16,856.66	16,688.19
Sinking Fund .....	.....	.....	4,000.00	4,715.00
Other debt reduction	88,000.00	62,000.00	105,102.00	96,300.00
Miscellaneous purposes	8,590.76	10,617.71	6,125.94	1,123.64
Total	\$406,449.59	\$228,342.98	\$301,519.20	\$268,567.41
Balance at end of year	62,982.08	8,155.05	11,123.13	9,687.70a
Grand total	\$469,431.67	\$236,498.03	\$312,642.33	\$258,879.71

a Deficit.

b Included in other general administrative office expenses.

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

	West Hartford	Hamden	Southington	Putnam
<i>Population 1920 census:</i>	8,854	8,611	8,440	8,397
Receipts:				
Taxes:				
Local sources	\$185,706.50	\$247,163.25	\$156,954.59	\$111,685.11
Certain shares of stock ..	74,090.92	508.03	3,289.69	1,214.08
Estate penalty	2,971.83	697.10	5,807.46	306.96
Special street assessments ..	34,453.28	334.67	.....	.....
Water works and supply ...	.....	.....	32,284.09	.....
Roads and bridges	6,187.87	.....	127.60	.....
Charities	494.87	1,367.22	2,608.24	898.79
Schools	6,420.44	34,323.40	12,023.63	9,750.75
Licenses	3,477.83	3,015.26	1,196.64	606.17
Court fines and penalties ...	1,533.83	500.00	894.67	.....
Temporary and other loans..	845,100.00	213,881.90	56,920.00	49,300.00
Miscellaneous sources	6,399.20	6,286.92	3,908.94	390.84
Total	\$1,166,836.57	\$508,077.75	\$276,015.55	\$174,152.70
Balance at beginning of year	7,611.88	6,305.50a	49,621.61	15,085.33
Grand total	\$1,174,448.45	\$501,772.25	\$325,637.16	\$189,238.03
Expenditures:				
Salaries	\$6,017.22	\$6,561.94	\$2,649.18	\$3,399.12
Other administrative expenses	27,189.82	10,030.33	6,743.72	3,523.05
Roads and bridges	126,166.54	102,720.76	15,009.58	23,574.69
Judicial	1,272.59	800.00	1,358.72	.....
Charities	3,523.59	9,936.93	9,736.28	17,704.91
Schools	134,031.72	136,297.61	113,839.18	49,746.34
Police	844.50	.....	.....	.....
Recreation	25.00	.....	422.29	1,500.00
Fire department .....	.....	18,310.65	3,665.29	.....
Sanitation and health	11,284.21	9,304.57	.....	.....
Public buildings .....	.....	1,578.35	.....	2,086.55
Water works and supply ...	.....	2,868.47	32,051.19c	.....
Taxes	22,108.01	11,420.27	9,935.28	8,394.08
Interest	37,795.80	10,207.04	4,866.19	10,356.92
Sinking Fund	6,240.50	18,333.34	3,500.00	.....
Other debt reduction	773,100.00	167,062.50	59,420.00	46,000.00
Miscellaneous purposes	7,906.69	10,894.35	9,853.82	4,091.72
Total	\$1,157,506.19	\$516,327.11	\$273,050.67	\$170,377.38
Balance at end of year	16,942.26	14,554.86b	52,586.49	18,860.65
Grand total	\$1,174,448.45	\$501,772.25	\$325,637.16	\$189,238.03

a Deficit.

b Of this amount \$12,229.76 represents a shortage as shown by auditor's report for period of last ten years.

c Water Works Department had gain of \$6,218.51 for the year which was used for enlarging plant and decreasing indebtedness.

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

	Killingly	Plainfield	Seymour	Branford
<i>Population 1920 census:</i>	8,178	7,926	6,781	6,627
Receipts:				
Taxes:				
Local sources	\$116,098.86	\$48,531.89	\$109,794.65	\$122,648.65
Certain shares of stock ..	1,870.18	1,370.80	2,367.98	1,720.86
Estate penalty .....	.....	1,769.92	157.63	2,127.88
Special street assessments ..	710.89	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges	1,625.72	.....	530.75	.....
Charities	4,465.67	1,950.22	744.59	426.57
Schools	6,602.44	5,836.81	5,056.88	4,248.11
Licenses	2,347.91	1,218.06	1,234.29	1,156.29
Court fines and penalties ...	655.79	317.05	650.53	1,044.90
Temporary and other loans..	82,000.00	74,775.00	37,000.00	193,077.08
Miscellaneous sources	2,661.59	680.08	3,405.12	768.67
Total	\$219,038.55	\$136,444.28	\$160,941.92	\$327,218.96
Balance at beginning of year	5,016.20	4,444.83	39,142.74	1,889.77
Grand total	\$224,054.75	\$140,889.11	\$200,084.66	\$329,108.73
Expenditures:				
Salaries	\$2,389.81	\$2,235.76	\$7,771.23	\$6,778.99
Other administrative expenses	8,756.99	1,928.43	5,768.98	11,702.37
Roads and bridges	26,047.45	15,908.81	16,892.11	15,364.38
Judicial	2,911.10	313.81	555.14	1,813.97
Charities	14,512.48	6,518.66	6,064.09	5,220.34
Schools	62,679.07	49,268.75	55,772.77	67,184.14
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	171.17	.....
Fire department .....	.....	88.40	5,299.35	1,722.71
Sanitation and health	287.81	446.96	644.00	.....
Public buildings	69.24	772.78	41,358.07	1,131.49
Water works and supply ...	.....	.....	.....	.....
Taxes	6,460.56	4,347.44	6,360.38	8,156.96
Interest	12,267.09	3,670.54	6,988.88	4,601.96
Sinking Fund .....	.....	1,000.00	.....	.....
Other debt reduction	72,000.00	46,000.00	39,000.00	203,177.08
Miscellaneous purposes	2,818.02	2,426.61	1,070.28	936.95
Total	\$211,149.62	\$134,926.90	\$198,716.45	\$327,791.84
Balance at end of year	12,905.13	5,962.21	6,368.21	1,317.89
Grand total	\$224,054.75	\$140,889.11	\$200,084.66	\$329,108.73

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

<i>Population 1920 census:</i>	Watertown 8,050	Plymouth 5,942	Windsor 5,620	Glastonbury 5,592
Receipts:				
Taxes:				
Local sources	\$135,378.02	\$102,306.89	\$190,751.42	\$112,252.22
Certain shares of stock ..	1,592.10	1,656.71	6,740.67	3,880.71
Estate penalty .....	.....	.....	197.80	254.53
Special street assessments ..	.....	.....	.....	50.00
Water works and supply ...	.....	.....	.....	.....
Roads and bridges	228.00	248.82	4,050.00	977.05
Charities	531.09	3,179.57	342.00	636.83
Schools	5,040.23	4,458.83	3,485.75	5,572.60
Licenses	983.85	119.80	393.37	.....
Court fines and penalties ...	270.98	596.63	408.57	344.23
Temporary and other loans..	60,000.00	52,000.00	53,000.00	81,000.00
Miscellaneous sources	988.29	3,035.25	3,752.77	1,963.06
Total	\$204,935.56	\$167,597.50	\$263,122.15	\$206,931.23
Balance at beginning of year	43,885.03	2,217.43	49,466.80	11,054.21
Grand total	\$248,320.59	\$169,814.93	\$312,588.95	\$217,985.44
Expenditures:				
Salaries	\$5,603.57	\$7,309.61	\$1,660.00	\$3,713.24
Other administrative expenses	6,782.02	1,911.55	5,651.13	899.24
Roads and bridges	33,349.41	18,026.86	39,569.08	41,841.08
Judicial	281.67	373.56	497.57	280.84
Charities	3,001.52	7,141.96	7,031.20	7,461.03
Schools	55,720.76	68,112.22	64,461.73	85,779.15
Police .....	.....	20.50	478.38	.....
Recreation .....	.....	220.75	.....	800.00
Fire department	1,687.66	1,374.66	.....	87.30
Sanitation and health	363.08	166.70	.....	1,358.30
Public buildings	59,313.87	2,227.16	3,788.24	.....
Water works and supply ...	.....	.....	.....	.....
Taxes	7,840.48	5,480.67	7,828.45	5,418.30
Interest	5,056.18	6,813.74	9,992.49	8,014.36
Sinking Fund .....	.....	1,731.60	.....	3,000.00
Other debt reduction	50,000.00	50,000.00	113,000.00	40,000.00
Miscellaneous purposes	738.39	1,735.52	2,132.77	4,360.71
Total	\$229,738.61	\$167,647.06	\$255,531.04	\$202,503.55
Balance at end of year	18,581.98	2,167.87	57,057.91	15,481.89
Grand total	\$248,320.59	\$169,814.93	\$312,588.95	\$217,985.44

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order
of population—1920 census

	Stafford 5,407	Westport 5,114	Thompson 5,055	New Milford 4,781
Population 1920 census:				
Receipts:				
Taxes:				
Local sources	\$81,183.63	\$133,379.42	\$49,665.47	\$78,695.70
Certain shares of stock ..	4,975.28	1,461.54	1,233.45	2,294.55
Estate penalty	116.73	.....	640.41	.....
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges	3.36	3,300.56	.....	43.60
Charities	424.62	298.14	787.84	3,225.72
Schools	4,720.59	9,563.42	24,154.86	3,599.50
Licenses	252.77	457.97	1,110.83	679.89
Court fines and penalties ...	729.15	561.41	318.55	85.68
Temporary and other loans..	52,000.00	66,298.61	14,000.00	57,500.00
Miscellaneous sources	351.85	6,368.44	465.96	720.55
Total	\$144,757.98	\$221,689.51	\$92,377.37	\$146,845.19
Balance at beginning of year	2,518.62	41,000.18	15,882.66	423.75
Grand total	\$147,276.60	\$262,689.69	\$108,260.03	\$147,268.94
Expenditures:				
Salaries	\$899.50	\$5,296.52	\$2,401.35	\$3,410.82
Other administrative expenses	8,837.34	3,720.64	1,100.38	2,104.17
Roads and bridges	18,822.43	40,628.71	16,233.56	27,736.68
Judicial	741.47	260.20	186.18	782.27
Charities	5,746.40	8,329.33	7,490.88	7,263.69
Schools	43,485.52	52,609.96	44,809.02	35,153.08
Police .....	.....	1,796.50	.....	.....
Recreation .....	.....	2,998.70	.....	189.27
Fire department	134.80	8,940.59	.....	.....
Sanitation and health	54.25	448.87	.....	394.55
Public buildings	323.00	10,746.34	292.06	2,427.67
Water works and supply ...	.....	337.50	.....	.....
Taxes	10,657.80	10,889.29	3,505.34	6,264.80
Interest	3,443.92	15,182.67	393.27	6,816.67
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction	50,000.00	45,000.00	14,000.00	54,000.00
Miscellaneous purposes	3,083.62	2,791.46	5,828.34	442.29
Total	\$146,230.05	\$209,977.28	\$96,241.28	\$146,985.96
Balance at end of year ...	1,046.55	52,712.41	12,018.75	282.98
Grand total	\$147,276.60	\$262,689.69	\$108,260.03	\$147,268.94

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

	Wethersfield 4,342	Berlin 4,298	Griswold 4,220	Darien 4,184
<i>Population 1920 census:</i>				
Receipts:				
Taxes:				
Local sources	\$66,640.63	\$76,223.94	\$55,038.60	\$126,565.16
Certain shares of stock ..	10,516.25	3,724.30	781.54	1,037.60
Estate penalty	124.45	197.53	.....	212.92
Special street assessments ..	539.00	.....	.....	.....
Water works and supply ...	.....	25.00	.....	.....
Roads and bridges .....	.....	.....	.....	252.57
Charities	1,110.11	286.87	24.00	155.64
Schools	1,844.66	6,892.08	3,810.82	7,435.21
Licenses	534.18	222.21	672.43	1,247.66
Court fines and penalties ...	38.03	1,844.49	484.52	101.91
Temporary and other loans ..	48,000.00	36,000.00	146,790.29	72,250.00
Miscellaneous sources	4,096.03	1,074.25	1,808.42	1,884.25
Total	\$133,443.84	\$126,490.62	\$208,910.62	\$211,142.92
Balance at beginning of year	3,912.70	1,811.81	11,055.41	51,937.28
Grand total	\$137,356.04	\$128,301.93	\$219,966.03	\$263,080.20
Expenditures:				
Salaries	\$1,796.13	\$3,380.20	\$1,010.00	\$3,279.00
Other administrative expenses	1,516.67	3,708.12	1,563.34	4,196.56
Roads and bridges	26,480.85	8,257.19	4,315.73	65,130.78
Judicial	141.52	1,620.36	686.14	352.06
Charities	6,924.37	2,760.73	3,738.77	4,323.55
Schools	36,594.02	54,098.78	35,151.14	51,783.06
Police .....	.....	.....	.....	1,491.50
Recreation	168.23	.....	.....	329.55
Fire department	156.00	.....	.....	1,833.92
Sanitation and health	447.77	329.75	.....	315.55
Public buildings	412.00	629.72	1,247.74	1,354.07
Water works and supply ...	.....	.....	.....	.....
Taxes	4,547.42	3,593.18	5,343.46	10,594.54
Interest	6,152.98	3,705.05	6,677.59	12,779.25
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction	50,000.00	38,000.00	147,000.00	87,000.00
Miscellaneous purposes	1,613.45	5,453.03	1,086.94	1,735.14
Total	\$136,951.41	\$125,536.11	\$207,820.85	\$246,397.63
Balance at end of year	404.63	2,765.82	12,145.18	16,682.57
Grand total	\$137,356.04	\$128,301.93	\$219,966.03	\$263,080.20

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

	Plainville 4,114	Suffield 4,070	Thomaston 3,993	Waterford 3,935
<i>Population 1920 census:</i>				
Receipts:				
Taxes:				
Local sources	\$68,151.48	\$84,104.79	\$76,356.58	\$67,802.64
Certain shares of stock ..	804.90	37,690.21	1,647.27	4,908.35
Estate penalty	10.40	309.28	.....	26.00
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	604.08	74.91	18.21
Charities	39.90	7,010.05	324.57	200.00
Schools	4,052.25	3,344.76	2,269.25	4,634.99
Licenses	572.44	709.44	631.17	824.23
Court fines and penalties ...	278.23	276.68	67.01	.....
Temporary and other loans..	34,500.00	53,500.00	37,500.00	10,000.00
Miscellaneous sources	788.60	6,804.93	4,213.42	975.96
Total	\$109,198.20	\$194,354.22	\$123,084.18	\$89,385.38
Balance at beginning of year	4,848.30	22,332.56	2,235.28	10,511.66
Grand total	\$114,046.50	\$216,686.78	\$125,319.46	\$99,897.04
Expenditures:				
Salaries	\$3,464.27	\$2,722.18	\$2,223.00	\$650.00
Other administrative expenses	1,731.94	6,420.88	2,570.14	5,692.76
Roads and bridges	8,725.90	42,335.37	19,052.46	13,188.66
Judicial	343.19	250.12	213.60	516.57
Charities	1,688.28	10,828.54	2,915.99	2,415.11
Schools	35,069.94	49,170.62	35,048.94	26,952.17
Police	1,034.13	121.00	182.35	.....
Recreation .....	.....	937.52	160.00	31.50
Fire department	1,389.35	806.54	789.22	50.80
Sanitation and health .....	.....	30.00	206.55	.....
Public buildings	8,500.00	8,618.47	8.75	200.00
Water works and supply ...	1,395.24	.....	716.14	.....
Taxes	3,777.28	8,120.77	4,821.48	5,123.62
Interest	3,103.52	955.54	3,107.49	11,085.16
Sinking Fund .....	.....	.....	.....	6,093.04
Other debt reduction	38,000.00	53,500.00	37,500.00	11,000.00
Miscellaneous purposes	1,865.44	15,994.87	7,410.49	803.15
Total	\$110,088.48	\$200,810.42	\$116,926.60	\$83,802.54
Balance at end of year	3,958.02	15,876.36	8,392.86	16,094.50
Grand total	\$114,046.50	\$216,686.78	\$125,319.46	\$99,897.04

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

<i>Population 1920 census:</i>	New Canaan 3,895	Farmington 3,844	East Windsor 3,741	Portland 3,644
Receipts:				
Taxes:				
Local sources	\$101,830.03	\$57,665.66	\$86,037.85	\$71,969.72
Certain shares of stock ..	778.37	11,771.06	1,686.91	3,543.07
Estate penalty	301.92	613.74	197.68	2.56
Special street assessments ..	1,557.20	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges	565.88	150.00	274.50	.....
Charities	942.15	577.69	5,198.65	1,670.02
Schools	10,321.70	2,840.19	8,197.23	7,626.86
Licenses	1,018.03	604.76	197.73	666.35
Court fines and penalties ...	139.97	76.31	164.64	11.00
Temporary and other loans ...	36,500.00	22,000.00	45,000.00	17,750.00
Miscellaneous sources	913.82	1,958.48	640.40	2,698.91
Total	\$154,869.07	\$98,257.84	\$147,595.59	\$105,938.49
Balance at beginning of year	15,487.76	4,758.85	2,113.69	2,714.53
Grand total	\$170,356.83	\$103,016.69	\$149,709.28	\$108,653.34
Expenditures:				
Salaries	\$2,976.00	\$2,173.78	\$2,567.22	\$3,222.35
Other administrative expenses	4,888.42	2,817.36	5,724.51	4,977.75
Roads and bridges	21,421.81	13,595.94	11,709.47	11,065.86
Judicial	357.35	434.05	.....	50.52
Charities	6,474.08	4,923.38	6,166.88	8,113.64
Schools	36,853.05	37,147.42	50,683.88	24,088.19
Police	232.25	339.00	.....	66.00
Recreation	300.00	.....	.....	.....
Fire department	1,500.00	.....	.....	3,312.53
Sanitation and health .....	.....	.....	.....	106.00
Public buildings	13,574.57	8,306.22	.....	1,745.96
Water works and supply ...	327.93	.....	.....	.....
Taxes	10,314.17	5,362.59	3,693.09	5,596.90
Interest	10,409.74	7,024.91	5,357.60	9,909.50
Sinking Fund	2,000.00	.....	.....	.....
Other debt reduction	36,500.00	22,000.00	49,000.00	35,913.86
Miscellaneous purposes	1,953.99	941.30	886.61	507.93
Total	\$150,083.46	\$100,065.90	\$135,789.26	\$108,697.10
Balance at end of year	20,273.37	2,950.79	13,920.02	43.76
Grand total	\$170,356.83	\$103,016.69	\$149,709.28	\$108,653.34

a Deficit.

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

	Windsor Locks	East Haven	Montville	Bethel
<i>Population 1920 census:</i>	3,554	3,520	3,411	3,201
Receipts:				
Taxes:				
Local sources	\$73,987.17	\$60,246.97	\$67,162.34	\$58,605.64
Certain shares of stock ..	7,097.20	97.61	331.11	187.29
Estate penalty	88.10	41.71	10.35	52.00
Special street assessments ..	316.08	.....	.....	.....
Water works and supply ...	.....	.....	.....	5,715.87
Roads and bridges	46.62	.....	.....	1,275.52
Charities	279.94	100.00	456.89	.....
Schools	3,120.85	4,607.15	4,601.56	8,635.40
Licenses	157.48	.....	730.76	615.75
Court fines and penalties ...	422.95	104.31	256.74	289.67
Temporary and other loans..	65,000.00	27,000.00	29,000.00	67,439.68
Miscellaneous sources	328.70	2,225.67	443.16	2,751.13
Total	\$150,845.09	\$94,423.42	\$102,992.91	\$143,567.75
Balance at beginning of year	3,121.40	2,688.94	7,499.26	1,411.33
Grand total	\$153,966.49	\$97,112.36	\$110,492.17	\$144,979.08
Expenditures:				
Salaries	\$4,292.70	\$3,175.07	\$502.45	\$750.00
Other administrative expenses	5,395.19	1,870.15	3,436.47	3,883.49
Roads and bridges	27,415.30	7,760.53	16,373.59	11,469.00
Judicial	48.87	.....	400.52	479.27
Charities	2,745.43	1,649.99	3,799.50	4,606.30
Schools	34,383.71	30,500.00	25,265.90	35,847.21
Police	4,280.63	78.10	.....	119.00
Recreation	4,500.00	41.75	.....	129.51
Fire department	1,993.86	374.90	14.80	2,745.26
Sanitation and health .....	.....	.....	342.50	108.25
Public buildings	15,786.63	.....	.....	400.00
Water works and supply ...	.....	1,662.89	.....	1,419.73
Taxes	5,699.32	3,441.03	3,592.41	5,283.38
Interest	7,226.04	4,719.89	4,048.02	7,229.00
Sinking Fund	4,050.18	1,840.00	.....	4,726.04
Other debt reduction	22,000.00	32,018.10	40,000.00	57,000.00
Miscellaneous purposes	789.25	5,528.99	552.75	2,835.34
Total	\$140,607.11	\$94,661.39	\$98,328.91	\$139,030.78
Balance at end of year	13,359.38	2,450.97	12,163.26	5,948.30
Grand total	\$153,966.49	\$97,112.36	\$110,492.17	\$144,979.08

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

	Litchfield 3,180	Simsbury 2,958	Cheshire 2,855	Essex 2,815
<i>Population 1920 census:</i>				
Receipts:				
Taxes:				
Local sources	\$93,568.23	\$55,878.02	\$44,470.09	\$37,789.03
Certain shares of stock ..	2,183.73	18,463.65	572.27	2,318.75
Estate penalty	33.44	46.35	107.20	49.32
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges	164.92	1,649.30	586.60	.....
Charities	10,200.58	7,353.57	3,097.28	225.10
Schools	5,093.41	4,789.10	3,790.72	1,731.25
Licenses	747.72	162.18	372.94	170.85
Court fines and penalties ...	67.77	181.49	722.94	74.59
Temporary and other loans..	19,100.00	15,000.00	20,000.00	15,000.00
Miscellaneous sources	624.29	839.34	1,161.60	1,183.50
Total	\$131,784.09	\$104,363.00	\$74,881.64	\$58,542.39
Balance at beginning of year	28,262.77	27,124.40	2,213.26 ^a	7,340.82
Grand total	\$160,046.86	\$131,487.40	\$72,668.38	\$65,883.21
Expenditures:				
Salaries	\$2,797.47	\$3,955.99	\$1,952.60	\$2,220.37
Other administrative expenses	4,844.00	23,745.80	3,327.76	829.72
Roads and bridges	20,407.27	.....	10,203.51	8,745.19
Judicial	1,195.05	341.25	1,103.28	60.84
Charities	15,500.76	10,571.65	5,151.77	1,474.88
Schools	41,353.38	47,369.66	25,642.93	19,993.06
Police .....	.....	.....	4.00	6.00
Recreation	5,150.00	.....	12.00	.....
Fire department	103.05	.....	272.85	600.00
Sanitation and health	65.25	.....	494.58	88.14
Public buildings	2,164.80	.....	1,400.00	735.91
Water works and supply ...	.....	.....	.....	.....
Taxes	8,214.87	5,133.17	3,535.56	3,728.20
Interest	3,063.61	295.97	2,162.32	1,222.16
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction	19,100.00	15,000.00	13,000.00	16,000.00
Miscellaneous purposes	2,252.55	4,519.94	1,670.37	866.00
Total	\$126,212.06	\$110,933.43	\$69,933.53	\$56,570.46
Balance at end of year	33,834.80	20,553.97	2,734.85	9,312.75
Grand total	\$160,046.86	\$131,487.40	\$72,668.38	\$65,883.21
^a A Deficit.				

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

<i>Population 1920 census:</i>	Guilford 2,803	Newtown 2,751	Preston 2,743	Middlefield 2,707
Receipts:				
Taxes:				
Local sources	\$46,949.29	\$54,825.82	\$16,604.63	\$74,116.25
Certain shares of stock ..	335.30	759.11	72.82	487.45
Estate penalty	977.26	613.17	.....	61.52
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	.....	.....	.....
Charities	195.37	44.43	8.57	454.50
Schools	2,792.50	9,980.86	2,618.91	2,664.43
Licenses	817.58	456.25	289.63	810.60
Court fines and penalties ...	123.08	166.63	57.66	84.60
Temporary and other loans..	14,000.00	6,000.00	7,000.00	28,700.00
Miscellaneous sources	1,880.07	1,644.51	353.87	2,190.12
Total	\$67,570.45	\$74,490.28	\$27,006.09	\$109,569.47
Balance at beginning of year	1,333.35	22,095.31	3,014.51	9,915.77
Grand total	\$68,903.80	\$96,585.59	\$30,020.60	\$118,485.24
Expenditures:				
Salaries	\$260.00	\$2,654.97	\$1,357.07	\$1,864.49
Other administrative expenses	2,557.15	3,855.93	62.61	4,002.12
Roads and bridges	5,662.92	17,088.28	3,931.06	11,004.59
Judicial	112.60	392.41	118.29	203.54
Charities	2,707.87	4,818.99	515.74	3,696.87
Schools	19,813.94	22,946.28	9,785.53	34,282.13
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	.....	.....
Fire department .....	.....	.....	.....	5,047.40
Sanitation and health .....	.....	665.64	.....	106.50
Public buildings	1,218.55	358.21	.....	2,111.74
Water works and supply ...	.....	.....	.....	.....
Taxes	3,740.36	4,785.11	1,248.66	9,366.91
Interest	3,261.47	2,360.14	2,139.27	4,674.31
Sinking Fund .....	.....	.....	.....	2,000.00
Other debt reduction	20,000.00	6,000.00	7,000.00	28,700.00
Miscellaneous purposes	2,184.17	2,155.40	415.78	962.84
Total	\$61,619.08	\$68,081.36	\$26,574.00	\$108,023.44
Balance at end of year	7,284.77	28,504.23	3,446.60	11,461.80
Grand total	\$68,903.80	\$96,585.59	\$30,020.60	\$118,485.24

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

	Trumbull 2,597	Mansfield 2,574	Canton 2,549	Sprague 2,500
<i>Population 1920 census:</i>				
Receipts:				
Taxes:				
Local sources	\$40,815.96	\$30,229.91	\$43,750.59	\$39,346.26
Certain shares of stock ..	874.90	584.14	413.09	179.70
Estate penalty	303.62	.....	.....	.....
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	.....	.....	.....
Charities .....	.....	30.00	3,021.20	145.06
Schools	4,618.42	4,642.46	8,470.11	2,339.07
Licenses	776.59	618.66	427.25	448.91
Court fines and penalties ...	307.51	56.84	27.00	54.91
Temporary and other loans..	104,000.00	26,050.00	40,500.00	20,000.00
Miscellaneous sources	1,178.86	1,144.25	2,899.87	1,156.48
Total	\$152,375.86	\$63,356.26	\$99,009.11	\$63,670.39
Balance at beginning of year	11,409.46	5,525.60	1,423.15a	401.20
Grand total	\$163,785.32	\$68,881.86	\$97,585.96	\$64,071.59
Expenditures:				
Salaries	\$2,203.38	\$1,635.06	\$2,135.37	\$594.60
Other administrative expenses	1,218.43	2,100.59	2,544.84	2,060.01
Roads and bridges	6,522.07	9,457.74	11,984.46	8,114.23
Judicial	162.54	28.35	106.56	202.50
Charities	1,686.56	2,235.22	3,928.07	1,642.65
Schools	82,518.77	21,961.50	24,760.68	16,257.15
Police .....	.....	.....	.....	1,449.50
Recreation .....	.....	.....	.....	.....
Fire department .....	.....	.....	.....	63.60
Sanitation and health .....	.....	48.55	284.05	219.10
Public buildings	63.60	4,446.45	.....	464.14
Water works and supply ...	.....	.....	.....	.....
Taxes	3,565.43	1,523.16	2,867.06	5,022.86
Interest	2,368.60	2,469.31	3,583.49	5,725.00
Sinking Fund .....	.....	.....	1,167.41	2,075.00
Other debt reduction	22,500.00	17,500.00	35,500.00	17,500.00
Miscellaneous purposes	1,040.98	940.13	1,224.96	1,547.63
Total	\$123,850.36	\$64,341.06	\$90,086.95	\$62,937.97
Balance at end of year	39,934.96	4,540.80	7,499.01	1,133.62
Grand total	\$163,785.32	\$68,881.86	\$97,585.96	\$64,071.59

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RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order
of population—1920 census

<i>Population 1920 census:</i>	Salisbury 2,497	Cromwell 2,454	Bloomfield 2,894	East Hampton 2,894
Receipts:				
Taxes:				
Local sources	\$49,569.22	\$38,896.28	\$61,251.24	\$57,044.04
Certain shares of stock ..	1,562.73	563.96	2,104.57	1,836.80
Estate penalty	168.44	.....	.....	.....
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges	108.75	.....	61.00	.....
Charities .....	.....	197.40	68.58	807.00
Schools	3,009.77	9,591.04	1,502.25	5,188.54
Licenses .....	.....	175.81	284.70	499.40
Court fines and penalties ...	187.41	81.19	529.75	1.00
Temporary and other loans..	15,000.00	15,000.00	19,230.19	27,000.00
Miscellaneous sources	964.19	93.18	2,118.64	1,279.02
Total	\$70,570.51	\$59,598.76	\$87,145.92	\$93,105.80
Balance at beginning of year	8,288.58	8,984.84	27,461.86	5,716.84
Grand total	\$78,859.09	\$68,583.60	\$114,607.78	\$98,822.14
Expenditures:				
Salaries	\$983.50	\$2,777.28	\$5,908.46	\$2,721.08
Other administrative expenses	1,854.87	1,654.52	1,057.71	4,609.84
Roads and bridges	25,628.71	6,065.17	9,440.68	15,653.69
Judicial	290.55	15.88	751.53	13.19
Charities	4,218.66	1,969.81	1,215.93	3,695.86
Schools	21,692.72	27,529.49	34,876.63	26,696.94
Police .....	.....	205.80	.....	43.00
Recreation .....	.....	.....	.....	100.00
Fire department .....	.....	24.50	.....	.....
Sanitation and health	35.25	239.20	.....	.....
Public buildings	1,435.35	2,000.00	1,280.66	.....
Water works and supply ...	.....	.....	.....	.....
Taxes	4,092.59	2,387.85	4,488.50	4,011.87
Interest	1,593.09	1,280.91	4,937.27	4,704.93
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction	15,000.00	15,000.00	31,882.40	32,000.00
Miscellaneous purposes	1,070.82	578.90	2,166.77	1,505.46
Total	\$77,896.11	\$61,728.26	\$97,456.44	\$95,755.86
Balance at end of year	962.98	6,855.34	17,151.24	3,066.28
Grand total	\$78,859.09	\$68,583.60	\$114,607.78	\$98,822.14

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

	Newington 2,381	Saybrook 2,325	East Haddam 2,312	East Lyme 2,291
Receipts:				
Taxes:				
Local sources	\$34,737.99	\$32,197.62	\$27,008.83	\$29,695.96
Certain shares of stock ..	1,079.76	1,770.48	8,053.25	173.95
Estate penalty	11.20	107.62	3.60	.....
Special street assessments ..	.....	56.34	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges	16.00	.....	140.38	.....
Charities .....	.....	.....	524.10	551.68
Schools	4,938.33	12,655.20	5,940.87	2,731.11
Licenses	358.74	161.55	244.22	941.94
Court fines and penalties ...	331.75	35.00	14.00	39.53
Temporary and other loans..	9,900.00	68,718.66	11,000.00	12,000.00
Miscellaneous sources	549.34	2,408.16	158.59	186.45
Total	\$51,923.11	\$118,110.68	\$53,082.84	\$46,320.62
Balance at beginning of year	72.14	1,006.12	15,921.75	15,366.59
Grand total	\$51,995.25	\$119,116.75	\$68,104.59	\$61,687.21
Expenditures:				
Salaries	\$2,668.34	\$950.20	\$2,527.11	\$1,835.11
Other administrative expenses	257.11	2,021.97	469.49	750.76
Roads and bridges	9,562.54	4,170.67	12,712.45	14,206.82
Judicial	155.56	.....	41.88	258.11
Charities	829.75	1,070.83	3,200.79	2,624.50
Schools	21,680.54	29,643.45	20,470.76	19,672.15
Police .....	.....	.....	.....	.....
Recreation	75.00	.....	.....	.....
Fire department	157.18	800.00	.....	58.50
Sanitation and health .....	.....	94.50	168.75	.....
Public buildings	20.00	6,541.96	752.12	.....
Water works and supply ...	.....	.....	.....	.....
Taxes	2,380.78	2,980.04	3,278.31	2,610.84
Interest	4,692.11	2,927.88	1,854.31	3,670.43
Sinking Fund	1,976.20	2,000.00	.....	.....
Other debt reduction	4,500.00	57,500.00	12,000.00	13,500.00
Miscellaneous purposes	1,787.94	1,483.45	963.83	2,018.02
Total	\$50,743.05	\$112,184.95	\$58,489.80	\$61,205.24
Balance at end of year	1,252.20	6,931.80	9,664.79	481.97
Grand total	\$51,995.25	\$119,116.75	\$68,104.59	\$61,687.21

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

	South Windsor 2,142	Willington 2,127	Colchester 2,050	Marwinton 2,020
<i>Population 1920 census:</i>				
Receipts:				
Taxes:				
Local sources	\$100,536.12	\$40,308.94	\$22,133.17	\$22,989.21
Certain shares of stock ..	7,654.86	2,036.68	542.89	115.11
Estate penalty	69.04	558.00	289.26	4.00
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges	844.00	20.00	.....	122.70
Charities	5,298.10	.....	81.50	418.68
Schools	4,130.12	9,618.92	23,071.83	9,456.46
Licenses	496.52	558.61	280.25	289.41
Court fines and penalties ...	156.65	18.91	81.28	88.00
Temporary and other loans..	62,000.00	33,388.75	5,000.00	11,000.00
Miscellaneous sources	1,823.43	1,688.45	752.00	665.69
Total	\$182,508.84	\$88,177.26	\$52,132.18	\$45,099.26
Balance at beginning of year	1,592.00	1,262.56	4,427.55	2,848.62
Grand total	\$184,100.84	\$89,439.82	\$56,559.73	\$47,947.88
Expenditures:				
Salaries	\$1,160.00	\$1,082.20	\$1,227.70	\$805.54
Other administrative expenses	2,736.24	1,006.31	538.08	1,434.55
Roads and bridges	28,364.08	8,960.81	8,054.83	4,015.58
Judicial	262.55	53.33	.....	99.06
Charities	7,092.58	2,964.44	2,493.01	1,862.35
Schools	41,497.95	21,161.60	24,959.38	25,677.12
Police .....	.....	.....	.....	.....
Recreation	50.00	.....	.....	.....
Fire department .....	.....	.....	.....	.....
Sanitation and health .....	.....	129.00	92.37	382.35
Public buildings	1,929.19	2,668.06	300.00	.....
Water works and supply ...	.....	.....	.....	.....
Taxes	6,477.53	1,914.87	2,378.45	1,248.53
Interest	4,725.39	1,639.00	1,164.73	1,784.00
Sinking Fund .....	.....	1,697.41	.....	.....
Other debt reduction ,.....	79,000.00	40,000.00	7,000.00	9,500.00
Miscellaneous purposes	1,156.94	515.31	805.24	1,151.59
Total	\$174,452.45	\$83,792.34	\$49,013.74	\$47,910.62
Balance at end of year	9,648.39	5,647.48	7,545.99	87.26
Grand total	\$184,100.84	\$89,439.82	\$56,559.73	\$47,947.88

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

<i>Population 1920 census:</i>	North Haven 1,968	North Canaan 1,933	Madison 1,857	New Hartford 1,781
Receipts:				
Taxes:				
Local sources	\$50,929.53	\$29,090.18	\$39,532.36	\$27,065.37
Certain shares of stock ..	2,513.29	1,181.87	272.81	476.72
Estate penalty	6.20	69.16	166.44	516.89
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	176.00	.....	.....
Charities	36.67	22.00	.....	369.72
Schools	5,146.87	5,151.83	889.75	4,909.63
Licenses	543.59	180.15	267.93	440.83
Court fines and penalties ...	193.44	81.02	125.15	272.80
Temporary and other loans..	7,000.00	10,000.00	18,500.00	18,000.00
Miscellaneous sources	1,198.54	520.00	922.69	507.90
Total	\$67,568.13	\$46,472.21	\$60,677.18	\$52,559.76
Balance at beginning of year	15,469.88	12,648.32	1,738.80	481.93
Grand total	\$83,038.01	\$59,120.53	\$62,415.93	\$53,041.69
Expenditures:				
Salaries	\$3,204.17	\$1,182.63	\$3,221.44	\$896.60
Other administrative expenses	.....	132.26	1,501.71	1,675.74
Roads and bridges	7,258.33	17,075.63	8,328.75	7,902.04
Judicial	96.68	.....	790.99	201.37
Charities	1,129.56	2,414.50	1,795.50	2,141.96
Schools	28,928.29	20,177.81	12,717.03	13,941.65
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	.....	.....
Fire department	346.25	300.00	.....	.....
Sanitation and health .....	.....	.....	.....	149.25
Public buildings	1,662.14	1,567.68	.....	1,556.73
Water works and supply ...	.....	.....	1,250.00	.....
Taxes	3,168.23	2,775.37	2,506.98	3,192.82
Interest	8,173.20	2,144.10	3,085.30	3,329.34
Sinking Fund	1,042.50	.....	.....	.....
Other debt reduction	25,000.00	1,000.00	20,500.00	15,000.00
Miscellaneous purposes	1,631.40	1,137.52	3,047.81	865.46
Total	\$81,635.75	\$49,907.70	\$58,745.51	\$50,853.01
Balance at end of year	1,402.26	9,212.83	3,670.42	2,188.68
Grand total	\$83,038.01	\$59,120.53	\$62,415.93	\$53,041.69

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

<i>Population 1920 census:</i>	Woodstock 1,767	Maddam 1,786	Woodbury 1,998	Chester 1,675
Receipts:				
Taxes:				
Local sources	\$22,875.55	\$22,756.36	\$49,382.85	\$29,021.80
Certain shares of stock ..	812.04	318.71	662.64	718.10
Estate penalty	565.26	.....	22.48	.....
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	.....	9.00	.....
Charities	2,867.76	.....	2,205.01	.....
Schools	18,539.55	6,928.01	3,684.68	2,949.37
Licenses	523.43	360.00	337.40	346.74
Court fines and penalties ...	112.59	36.48	412.67	77.26
Temporary and other loans..	14,100.00	23,000.00	.....	18,250.00
Miscellaneous sources	453.46	73.88	558.49	567.75
Total	\$55,349.64	\$53,467.94	\$57,275.22	\$51,931.02
Balance at beginning of year	3,173.40	1,667.50	981.66	109.01
Grand total	\$58,523.04	\$55,135.44	\$58,256.88	\$52,040.03
Expenditures:				
Salaries	\$712.45	\$1,664.81	\$1,208.95	\$826.40
Other administrative expenses	1,212.00	133.70	830.06	437.31
Roads and bridges	10,850.89	6,220.52	3,620.62	10,345.14
Judicial	104.80	40.17	484.47	90.43
Charities	5,492.20	2,322.07	8,578.72	349.73
Schools	16,842.74	19,721.26	14,492.91	15,470.08
Police .....	.....	.....	8.00	30.00
Recreation .....	.....	.....	35.00	292.50
Fire department .....	.....	62.90	19.30	403.90
Sanitation and health .....	.....	79.25	12.50	164.89
Public buildings	100.00	.....	8,706.70	575.00
Water works and supply ...	.....	.....	.....	.....
Taxes	1,578.81	1,950.42	1,969.38	2,062.13
Interest	858.10	461.35	2,310.07	1,101.48
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction	12,600.00	19,000.00	350.00	19,000.00
Miscellaneous purposes	1,279.40	2,563.57	1,263.37	751.25
Total	\$51,631.39	\$54,220.02	\$38,890.05	\$51,900.24
Balance at end of year	6,891.65	915.42	19,366.83	139.79
Grand total	\$58,523.04	\$55,135.44	\$58,256.88	\$52,040.03

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

	Somers	Brooklyn	Rocky Hill	Washington
<i>Population 1920 census:</i>	1,673	1,655	1,633	1,619
Receipts:				
Taxes:				
Local sources	\$23,984.06	\$24,835.64	\$19,689.25	\$39,825.97
Certain shares of stock ..	1,708.01	824.70	151.11	157.77
Estate penalty	122.65	65.12	53.44	43.52
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges	129.30	.....	.....	49.59
Charities	26.71	181.80	.....	245.00
Schools	9,684.91	2,720.45	3,261.32	1,263.41
Licenses	387.50	329.39	365.44	590.42
Court fines and penalties ...	173.60	69.50	75.83	17.00
Temporary and other loans..	9,500.00	12,500.00	10,000.00	32,300.00
Miscellaneous sources	472.58	20.66	420.22	346.50
Total	\$46,139.32	\$41,497.26	\$34,016.61	\$74,639.18
Balance at beginning of year	4,230.94	3,705.45	844.35	1,039.04
Grand total	\$50,370.26	\$45,202.71	\$34,860.96	\$75,678.22
Expenditures:				
Salaries	\$753.00	\$1,607.51	\$1,771.90	\$1,985.06
Other administrative expenses	901.80	1,862.00	412.64	2,820.53
Roads and bridges	9,530.29	5,469.23	5,098.59	13,503.13
Judicial	45.94	32.38	168.93	.....
Charities	1,604.70	2,262.70	1,255.61	1,128.75
Schools	18,860.48	14,782.39	15,587.32	23,150.00
Police	16.15	.....	.....	.....
Recreation .....	.....	.....	.....	.....
Fire department	85.90	124.20	88.39	.....
Sanitation and health	219.00	.....	.....	.....
Public buildings .....	.....	271.51	.....	427.00
Water works and supply ...	.....	.....	.....	.....
Taxes	2,501.89	1,496.98	1,432.06	3,841.96
Interest	1,455.96	2,360.12	2,995.16	2,118.27
Sinking Fund .....	.....	932.00	.....	.....
Other debt reduction	3,700.00	9,000.00	4,000.00	22,000.00
Miscellaneous purposes	1,074.98	637.50	1,534.49	1,285.38
Total	\$40,750.09	\$40,338.52	\$34,145.09	\$72,260.08
Balance at end of year	9,620.17	4,864.19	715.87	3,418.14
Grand total	\$50,370.26	\$45,202.71	\$34,860.96	\$75,678.22

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

	Beacon Falls 1,593	Sharon 1,585	Coventry 1,582	Avon 1,534
Receipts:				
Taxes:				
Local sources	\$20,819.86	\$38,571.04	\$23,574.44	\$33,665.83
Certain shares of stock ..	160.96	300.20	210.18	1,428.57
Estate penalty .....	.....	.....	.....	.....
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	3,395.19	211.50	200.00
Charities .....	.....	424.75	338.00	.....
Schools	6,965.53	893.85	7,510.84	2,718.56
Licenses	174.45	572.14	289.66	126.00
Court fines and penalties ...	119.00	57.60	70.71	.....
Temporary and other loans..	10,000.00	5,000.00	8,500.00	6,000.00
Miscellaneous sources	128.86	291.44	323.98	542.77
Total	\$38,368.66	\$49,506.21	\$41,029.31	\$44,681.28
Balance at beginning of year	884.81	18,010.00	3,940.37	6,407.68
Grand total	\$39,252.97	\$62,516.21	\$44,969.68	\$51,088.91
Expenditures:				
Salaries	\$1,543.78	\$3,659.66	\$834.31	\$1,084.99
Other administrative expenses	632.24	683.36	1,760.56	602.46
Roads and bridges	4,457.45	12,879.32	6,822.58	6,606.16
Judicial	167.48	.....	14.75	.....
Charities	907.68	3,489.25	1,914.61	1,107.20
Schools	18,110.58	17,351.31	15,392.21	18,593.85
Police	92.75	.....	72.91	.....
Recreation .....	.....	.....	.....	.....
Fire department	344.80	.....	6.20	.....
Sanitation and health	486.90	425.95	.....	245.95
Public buildings .....	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Taxes	1,119.35	3,674.11	2,427.68	1,207.07
Interest	769.38	269.36	1,058.35	305.89
Sinking fund .....	.....	.....	.....	.....
Other debt reduction	10,000.00	4,500.00	10,500.00	11,000.00
Miscellaneous purposes	417.91	364.23	857.00	502.71
Total	\$34,050.80	\$47,296.55	\$41,661.16	\$41,255.78
Balance at end of year	5,202.67	15,219.66	3,308.52	9,833.13
Grand total	\$39,252.97	\$62,516.21	\$44,969.68	\$51,088.91

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

<i>Population 1920 census:</i>	Old Saybrook 1,463	Pomfret 1,454	Lebanon 1,343	Granby 1,342
Receipts:				
Taxes:				
Local sources	\$29,775.19	\$31,569.86	\$22,454.37	\$22,614.16
Certain shares of stock ..	339.64	222.09	447.94	1,203.56
Estate penalty	61.20	6,113.17	43.02	43.80
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges	11.20	150.00	94.51	91.00
Charities .....	.....	.....	.....	652.25
Schools	8,393.95	4,632.91	4,633.37	4,475.56
Licenses	398.37	770.26	390.79	143.06
Court fines and penalties ...	93.94	82.41	152.00	10.00
Temporary and other loans..	38,000.00	2,300.00	20,000.00	8,316.00
Miscellaneous sources	928.55	592.86	98.73	402.19
Total	\$73,000.04	\$46,433.56	\$48,314.73	\$37,951.47
Balance at beginning of year	1,458.08	9,308.36	8,989.84	6,209.81
Grand total	\$74,458.12	\$55,741.92	\$52,304.57	\$44,161.28
Expenditures:				
Salaries	\$595.40	\$819.09	\$1,867.35	\$1,745.04
Other administrative expenses	329.84	645.53	387.40	1,009.74
Roads and bridges	3,929.97	14,511.47	9,590.95	8,554.11
Judicial	70.39	81.45	114.85	18.85
Charities	1,098.31	2,318.27	1,502.89	906.61
Schools	14,433.53	17,689.32	14,119.46	8,753.33
Police .....	.....	.....	10.86	.....
Recreation	49.45	51.75	.....	85.00
Fire department	27.90	13.95	4.80	.....
Sanitation and health	28.65	20.80	48.86	.....
Public buildings	937.59	.....	188.70	9,812.01
Water works and supply ...	.....	.....	.....	.....
Taxes	4,378.09	2,190.55	1,873.37	1,417.00
Interest	2,535.18	795.59	1,475.62	968.58
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction	41,450.00	15,000.00	13,000.00	8,816.00
Miscellaneous purposes	906.27	1,081.08	840.26	373.02
Total	\$70,770.57	\$55,218.85	\$44,950.37	\$42,309.29
Balance at end of year	3,687.55	523.07	7,354.20	1,851.99
Grand total	\$74,458.12	\$55,741.92	\$52,304.57	\$44,161.28

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

	Bedding	Wilton	Sterling	Norfolk
<i>Population 1920 census:</i>	1,315	1,284	1,266	1,229
Receipts:				
Taxes:				
Local sources	\$27,032.80	\$28,989.47	\$18,822.67	\$56,893.74
Certain shares of stock ..	186.03	540.64	18.06	2,374.29
Estate penalty .....	.....	305.69	.....	4,500.97
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	.....	.....	2,402.60
Charities	66.60	59.00	.....	485.00
Schools	4,080.93	6,247.53	2,822.30	4,519.34
Licenses	495.65	189.95	361.28	888.08
Court fines and penalties ...	.....	62.66	28.95	219.06
Temporary and other loans..	2,500.00	9,900.00	2,500.00	32,800.00
Miscellaneous sources	718.93	83.14	231.12	3,540.20
Total	\$35,080.44	\$46,378.08	\$24,784.88	\$108,128.28
Balance at beginning of year	3,679.15	4,093.69	5,290.42	7,827.86
Grand total	\$38,759.59	\$50,471.77	\$30,074.80	\$115,450.64
Expenditures:				
Salaries	\$1,512.69	\$1,319.15	\$766.50	\$1,369.95
Other administrative expenses	787.44	1,547.51	529.93	154.62
Roads and bridges	9,788.68	10,106.35	4,776.55	25,617.61
Judicial	44.79	119.86	216.52	75.62
Charities	990.83	2,592.69	726.59	3,110.82
Schools	12,523.71	16,328.58	11,659.01	23,668.53
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	.....	.....
Fire department .....	.....	.....	.....	1,941.25
Sanitation and health .....	.....	30.00	.....	91.75
Public buildings .....	.....	132.35	.....	.....
Water works and supply ...	.....	.....	.....	.....
Taxes	2,553.83	2,529.43	1,048.06	5,121.16
Interest	831.21	1,556.11	1,119.73	3,552.51
Sinking Fund	1,015.90	500.00	.....	1,468.25
Other debt reduction	3,500.00	9,900.00	5,000.00	33,500.00
Miscellaneous purposes	587.99	399.30	238.65	974.00
Total	\$34,137.07	\$47,061.33	\$26,081.54	\$100,646.07
Balance at end of year	4,622.52	3,410.44	3,993.26	14,804.57
Grand total	\$38,759.59	\$50,471.77	\$30,074.80	\$115,450.64

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

<i>Population 1920 census:</i>	Clinton 1,217	Willington 1,200	Woodbridge 1,170	Ledyard 1,161
Receipts:				
Taxes:				
Local sources	\$21,911.36	\$13,597.37	\$28,307.76	\$11,394.98
Certain shares of stock ..	1,152.15	1,271.06	504.49	192.88
Estate penalty	608.00	.....	.....	413.82
Special street assessments ..	185.77	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	42.08	.....	.....
Charities	217.28	92.49	421.75	125.00
Schools	670.50	5,884.25	2,222.75	3,880.74
Licenses	195.70	803.12	463.36	622.14
Court fines and penalties ...	93.62	89.09	.....	46.54
Temporary and other loans..	1,000.00	.....	57,500.00	3,000.00
Miscellaneous sources	470.07	270.11	843.94	20.00
Total	\$26,504.45	\$21,549.57	\$89,764.05	\$19,695.60
Balance at beginning of year	9,551.64	15,008.87	702.94	1,845.99
Grand total	\$36,056.09	\$36,558.24	\$90,466.99	\$21,541.59
Expenditures:				
Salaries	\$918.81	\$668.09	\$1,706.92	\$518.43
Other administrative expenses	596.45	1,788.97	40.15	329.40
Roads and bridges	7,506.76	6,681.71	8,442.36	3,210.74
Judicial	80.79	114.38	.....	82.05
Charities	658.09	1,073.59	1,202.88	926.93
Schools	1,028.68	13,067.20	10,218.91	8,047.06
Police	249.50	.....	.....	.....
Recreation	235.00	.....	.....	.....
Fire department	135.25	.....	.....	19.60
Sanitation and health	122.01	.....	28.61	26.75
Public buildings	300.00	.....	22,120.95	.....
Water works and supply ...	973.96	.....	.....	.....
Taxes	1,807.19	1,917.53	1,746.21	1,363.41
Interest	1,561.84	167.55	1,312.98	124.33
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction	9,200.00	.....	31,500.00	3,000.00
Miscellaneous purposes	2,864.93	97.38	943.38	430.96
Total	\$28,237.26	\$25,576.35	\$79,258.35	\$18,079.71
Balance at end of year	7,818.83	10,981.89	11,208.64	3,461.58
Grand total	\$36,056.09	\$36,558.24	\$90,466.99	\$21,541.59

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order
of population—1920 census

<i>Population 1920 census:</i>	Monroe 1,161	No. Stonington 1,144	No. Branford 1,110	Burlington 1,109
Receipts:				
Taxes:				
Local sources	\$11,955.09	\$12,729.22	\$18,510.02	\$16,670.50
Certain shares of stock ..	186.92	184.50	105.02	11.75
Estate penalty .....	.....	.....	.....	.....
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	12.00	.....	.....
Charities .....	.....	436.09	.....	140.26
Schools	1,948.11	5,208.74	3,210.98	8,105.22
Licenses	419.98	514.88	262.99	208.00
Court fines and penalties ...	139.43	.....	42.82	564.42
Temporary and other loans..	7,985.00	2,000.00	42,000.00	3,000.00
Miscellaneous sources	300.59	350.25	384.89	374.38
Total	\$22,980.12	\$21,880.68	\$64,516.22	\$29,069.51
Balance at beginning of year	625.82a	1,515.99	2,403.77	5,410.50
Grand total	\$22,304.30	\$22,896.67	\$66,919.99	\$34,480.01
Expenditures:				
Salaries	\$1,143.09	\$835.09	\$746.22	\$300.00
Other administrative expenses	458.86	404.98	188.18	1,458.30
Roads and bridges	6,097.50	2,008.92	6,766.50	4,940.75
Judicial	137.44	.....	25.84	.....
Charities	227.80	1,083.48	324.73	3,215.98
Schools	7,571.86	6,271.51	9,660.02	10,761.92
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	.....	100.00
Fire department .....	.....	35.65	.....	.....
Sanitation and health	124.98	59.15	.....	24.00
Public buildings .....	.....	.....	11,206.34	.....
Water works and supply ...	.....	.....	.....	.....
Taxes	923.58	1,133.32	1,082.18	861.02
Interest	612.49	2,056.60	1,425.98	815.81
Sinking Fund .....	.....	.....	2,000.00	.....
Other debt reduction	3,500.00	5,500.00	22,729.67	3,000.00
Miscellaneous purposes	434.65	807.31	136.03	1,344.82
Total	\$21,232.25	\$20,196.01	\$56,291.69	\$26,817.40
Balance at end of year	1,072.05	2,700.66	10,628.30	7,662.61
Grand total	\$22,304.30	\$22,896.67	\$66,919.99	\$34,480.01

a Deficit.

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order
of population—1920 census

<i>Population 1920 census:</i>	Southbury 1,093	Kent 1,086	Middlebury 1,067	East Granby 1,056
Receipts:				
Taxes:				
Local sources	\$18,198.18	\$25,825.11	\$18,600.00	\$22,668.26
Certain shares of stock ..	271.89	68.83	355.39	226.68
Estate penalty .....	.....	44.00	19.56	4.72
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges	7.00	22.50	.....	.....
Charities .....	.....	536.28	.....	104.00
Schools	7,747.07	8,493.39	8,815.40	2,169.58
Licenses	216.17	818.77	818.90	266.16
Court fines and penalties ...	49.36	65.80	75.62	86.01
Temporary and other loans..	10,500.00	6,000.00	1,000.00	10,000.00
Miscellaneous sources	145.68	377.29	335.06	.....
Total	\$37,135.35	\$41,751.77	\$19,519.98	\$35,525.41
Balance at beginning of year	4,970.79	2,314.57	101.47	1,866.56
Grand total	\$42,106.14	\$44,066.34	\$19,621.40	\$37,391.97
Expenditures:				
Salaries	\$1,815.27	\$463.60	\$286.65	\$1,658.62
Other administrative expenses	1,072.45	2,130.89	292.92	865.84
Roads and bridges	6,904.56	7,721.52	5,128.53	14,580.16
Judicial .....	.....	23.20	98.63	34.29
Charities	1,481.66	1,040.22	338.72	939.71
Schools	12,053.22	13,556.53	9,542.33	10,744.41
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	159.75	.....
Fire department .....	.....	.....	.....	.....
Sanitation and health .....	.....	.....	.....	.....
Public buildings .....	.....	850.00	677.26	.....
Water works and supply ...	.....	.....	.....	.....
Taxes	1,216.81	1,598.15	1,338.78	1,298.71
Interest	2,472.77	1,719.74	467.37	685.00
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction	8,000.00	6,000.00	1,000.00	.....
Miscellaneous purposes	1,305.42	404.27	148.76	606.55
Total	\$36,322.16	\$35,508.12	\$19,479.65	\$30,912.29
Balance at end of year	5,783.98	8,558.22	141.75	6,479.68
Grand total	\$42,106.14	\$44,066.34	\$19,621.40	\$37,391.97

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

	Middlefield	Tolland	Hartson	Oxford
Population 1920 census:	1,047	1,040	1,017	998
Receipts:				
Taxes:				
Local sources	\$18,187.19	\$14,728.94	\$13,055.53	\$17,177.60
Certain shares of stock ..	55.87	888.80	120.19	69.74
Estate penalty	6.00	.....	.....	1.84
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	9.18	161.68	75.00
Charities .....	.....	49.50	.....	175.00
Schools	2,531.40	8,780.81	2,554.13	4,005.61
Licenses	131.30	807.76	492.00	492.82
Court fines and penalties ...	.....	21.49	37.03	112.62
Temporary and other loans..	280.00	7,500.00	2,500.00	.....
Miscellaneous sources	129.05	1,122.74	405.20	290.13
Total	\$16,820.81	\$32,909.22	\$19,325.76	\$22,400.36
Balance at beginning of year	237.84	961.71	1,269.15	901.66
Grand total	\$16,558.65	\$33,870.93	\$20,594.91	\$23,302.02
Expenditures:				
Salaries .....	.....	\$801.10	\$421.57	\$1,605.05
Other administrative expenses	\$1,464.91	862.24	1,275.23	707.90
Roads and bridges	1,847.58	3,112.26	7,169.93	4,590.49
Judicial .....	.....	.....	36.46	1,110.48
Charities	488.01	1,716.12	752.65	1,120.09
Schools	8,735.07	13,026.78	7,790.55	10,501.96
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	.....	.....
Fire department .....	.....	.....	.....	.....
Sanitation and health .....	.....	.....	.....	96.00
Public buildings	665.23	197.90	.....	.....
Water works and supply ...	.....	.....	.....	.....
Taxes	1,034.83	1,336.73	1,881.62	1,100.36
Interest	75.00	1,972.29	163.83	1,698.42
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction	1,000.00	7,500.00	.....	.....
Miscellaneous purposes	172.72	51.15	495.71	348.07
Total	\$15,483.35	\$30,576.57	\$19,987.55	\$22,878.82
Balance at end of year	1,075.30	3,294.36	607.36	423.20
Grand total	\$16,558.65	\$33,870.93	\$20,594.91	\$23,302.02

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

<i>Population 1920 census:</i>	Durham 959	Old Lyme 946	Hebron 915	Brookfield 896
Receipts:				
Taxes:				
Local sources	\$14,774.21	\$20,260.75	\$12,990.03	\$11,621.90
Certain shares of stock ..	133.44	490.41	215.92	167.45
Estate penalty .....	.....	167.98	75.23	.....
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	34.80	64.50	.....
Charities .....	.....	869.61	160.53	.....
Schools	8,794.39	5,217.84	2,882.13	2,755.70
Licenses	245.88	850.06	807.77	221.36
Court fines and penalties ...	152.19	6.00	142.00	.....
Temporary and other loans..	6,500.00	14,800.00	5,200.00	6,910.50
Miscellaneous sources	678.00	259.21	637.20	75.00
Total	\$31,277.61	\$41,456.16	\$22,675.40	\$21,751.91
Balance at beginning of year	8,248.06	541.27	1,241.04	2,014.22
Grand total	\$34,525.67	\$41,997.43	\$23,916.44	\$23,766.13
Expenditures:				
Salaries	\$384.28	\$474.82	\$647.29	\$587.45
Other administrative expenses	1,667.29	596.52	531.16	547.90
Roads and bridges	4,107.41	6,437.39	3,817.28	15,248.89
Judicial	69.61	26.71	117.09	.....
Charities	210.98	1,004.43	938.92	729.42
Schools	10,646.75	12,321.76	9,337.23	6,769.32
Police .....	.....	264.31	.....	.....
Recreation .....	.....	.....	.....	.....
Fire department .....	.....	77.60	.....	4.00
Sanitation and health .....	.....	217.73	.....	.....
Public buildings	899.30	250.49	.....	121.41
Water works and supply ...	.....	.....	.....	.....
Taxes	1,359.77	2,092.63	999.02	1,096.38
Interest	1,342.15	1,999.40	1,283.83	544.50
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction	8,500.00	14,550.00	3,830.00	2,125.00
Miscellaneous purposes	425.82	400.92	483.54	301.10
Total	\$29,613.36	\$40,714.71	\$21,985.36	\$28,075.37
Balance at end of year	4,912.31	1,282.72	1,931.08	4,309.21 ^a
Grand total	\$34,525.67	\$41,997.43	\$23,916.44	\$23,766.13

^a Deficit.

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

<i>Population 1920 census:</i>	Canterbury 896	Lisbon 867	Borrah 858	Westbrook 849
Receipts:				
Taxes:				
Local sources	\$11,201.85	\$11,465.97	\$10,320.04	\$18,878.08
Certain shares of stock ..	49.46	207.61	47.78	207.61
Estate penalty .....	.....	.....	.....	.....
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	.....	.....	.....
Charities	15.48	152.69	78.28	.....
Schools	2,879.71	2,718.43	2,944.82	2,254.26
Licenses	303.26	280.62	.....	236.67
Court fines and penalties ...	12.00	64.53	18.40	244.95
Temporary and other loans..	1,000.00	2,500.00	1,500.00	6,500.00
Miscellaneous sources	19.58	527.96	1,465.85	1,380.87
Total	\$15,481.29	\$17,917.81	\$16,375.17	\$29,701.94
Balance at beginning of year	1,593.36	194.04	2,451.46	3,638.51
Grand total	\$17,074.65	\$18,111.85	\$18,826.63	\$33,340.45
Expenditures:				
Salaries	\$461.11	\$500.00	\$800.00	\$1,661.20
Other administrative expenses	674.56	.....	256.51	332.02
Roads and bridges	1,948.90	1,907.59	4,334.63	6,884.11
Judicial .....	.....	65.14	17.41	80.89
Charities	350.13	575.87	596.30	496.88
Schools	6,685.44	7,582.61	8,872.37	9,107.38
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	.....	.....
Fire department .....	.....	.....	.....	.....
Sanitation and health	23.65	.....	.....	.....
Public buildings .....	.....	.....	.....	1,903.98
Water works and supply ...	.....	.....	.....	.....
Taxes	586.77	819.16	825.64	1,784.70
Interest	620.62	1,977.91	843.70	953.47
Sinking Fund .....	.....	1,747.95	.....	.....
Other debt reduction .....	.....	.....	1,000.00	1,500.00
Miscellaneous purposes	429.13	1,071.90	583.22	281.97
Total	\$11,780.31	\$16,198.13	\$18,129.78	\$24,986.55
Balance at end of year	5,294.34	1,913.72	696.85	8,353.90
Grand total	\$17,074.65	\$18,111.85	\$18,826.63	\$33,340.45

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

<i>Population 1920 census:</i>	Cornwall 884	Marhamsted 719	Wolecott 719	Columbia 706
Receipts:				
Taxes:				
Local sources	\$15,472.80	\$11,405.27	\$12,465.74	\$9,779.94
Certain shares of stock ..	630.88	174.19	8.99	82.69
Estate penalty .....	.....	.....	32.00	4.00
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges	647.29	.....	.....	.....
Charities	463.90	.....	.....	.....
Schools	3,179.26	7,858.50	5,632.33	5,628.19
Licenses	152.72	227.63	210.28	157.90
Court fines and penalties ...	128.10	.....	66.12	5.00
Temporary and other loans..	6,100.00	5,500.00	.....	7,900.00
Miscellaneous sources	8.75	12.00	590.00	112.03
Total	\$26,777.70	\$24,677.59	\$19,005.46	\$23,669.75
Balance at beginning of year	787.89	1,389.02	3,698.51	1,404.72
Grand total	\$27,565.09	\$26,066.61	\$22,703.97	\$25,074.47
Expenditures:				
Salaries	\$320.00	\$781.66	\$745.40	\$301.59
Other administrative expenses	1,085.17	245.89	637.48	811.08
Roads and bridges	5,752.33	2,621.71	3,556.41	2,028.13
Judicial	123.35	.....	16.89	.....
Charities	1,637.64	160.00	104.29	1,020.59
Schools	7,808.92	10,225.96	7,918.94	8,010.90
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	.....	.....
Fire department .....	.....	.....	.....	43.00
Sanitation and health .....	.....	.....	.....	316.12
Public buildings .....	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Taxes	1,333.35	1,062.17	645.98	868.41
Interest	1,362.38	1,441.50	330.00	731.05
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction	7,600.00	6,000.00	1,000.00	8,900.00
Miscellaneous purposes	252.31	889.77	468.29	250.63
Total	\$26,775.45	\$22,928.66	\$15,423.68	\$23,281.30
Balance at end of year	789.64	3,137.95	7,280.29	1,795.17
Grand total	\$27,565.09	\$26,066.61	\$22,703.97	\$25,074.47

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

<i>Population 1920 census:</i>	Weston 703	Goshen 675	Lyme 674	Ashford 673
Receipts:				
Taxes:				
Local sources	\$7,537.62	\$14,844.40	\$9,031.88	\$9,891.15
Certain shares of stock ..	25.84	1,442.64	33.82	1,357.07
Estate penalty .....	.....	.....	30.00	233.20
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	.....	6.40	.....
Charities	50.00	.....	5.00	.....
Schools	2,020.32	4,022.18	1,756.31	3,391.51
Licenses	261.53	57.21	132.65	72.93
Court fines and penalties ...	.....	.....	32.61	2.50
Temporary and other loans..	.....	5,000.00	.....	800.00
Miscellaneous sources	7.31	461.40	670.15	319.10
Total	\$9,902.62	\$25,827.78	\$11,698.82	\$16,117.46
Balance at beginning of year	39.43	2,193.17	4,849.88	2,158.56
Grand total	\$9,942.05	\$28,020.95	\$16,548.70	\$18,276.02
Expenditures:				
Salaries	\$370.00	\$252.50	\$937.56	\$454.23
Other administrative expenses	1,950.59	1,622.98	132.78	164.79
Roads and bridges	2,664.88	3,523.10	3,124.20	5,232.70
Judicial	67.43	35.00	5.70	.....
Charities	328.69	942.51	612.50	1,480.41
Schools	5,297.41	10,243.91	4,291.67	6,334.47
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	.....	.....
Fire department .....	.....	.....	4.00	.....
Sanitation and health .....	.....	.....	.....	24.00
Public buildings .....	.....	104.25	.....	.....
Water works and supply ...	.....	.....	.....	.....
Taxes	709.73	1,012.01	1,430.89	660.67
Interest	827.42	374.00	2,271.93	498.04
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction .....	.....	6,000.00	2,000.00	1,321.00
Miscellaneous purposes	232.84	187.22	563.92	329.88
Total	\$12,448.99	\$24,297.48	\$15,375.15	\$16,500.19
Balance at end of year	2,506.94a	3,723.47	1,173.55	1,775.83
Grand total	\$9,942.05	\$28,020.95	\$16,548.70	\$18,276.02
a Deficit.				

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

<i>Population 1920 census:</i>	Voluntown 656	Boxbury 647	Canaan 561	Franklin 552
Receipts:				
Taxes:				
Local sources	\$10,781.46	\$11,731.32	\$14,062.64	\$10,108.57
Certain shares of stock ..	.....	117.74	850.14	59.29
Estate penalty .....	.....	.....	.....	.....
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges	29.00	.....	47.00	.....
Charities .....	.....	7.71	.....	.....
Schools	3,265.48	2,326.09	1,395.32	2,325.23
Licenses	218.97	169.94	124.00	162.85
Court fines and penalties ...	.....	5.00	178.46	26.93
Temporary and other loans..	3,000.00	6,954.40	.....	.....
Miscellaneous sources .....	.....	98.00	129.23	76.10
Total	\$17,294.91	\$21,410.20	\$16,786.79	\$12,758.97
Balance at beginning of year	898.18	1,147.03	6,169.19	1,653.70
Grand total	\$18,193.09	\$22,557.23	\$22,955.98	\$14,412.67
Expenditures:				
Salaries	\$519.80	\$857.85	\$498.65	\$690.30
Other administrative expenses	912.77	503.16	591.75	424.06
Roads and bridges	1,827.55	2,423.25	7,432.24	3,006.79
Judicial .....	.....	.....	129.07	34.39
Charities	1,488.34	243.94	906.46	232.56
Schools	6,101.48	5,808.30	5,158.09	6,397.82
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	.....	.....
Fire department	5.70	.....	.....	.....
Sanitation and health	18.00	.....	.....	.....
Public buildings .....	.....	66.00	.....	.....
Water works and supply ...	.....	.....	.....	.....
Taxes	764.96	1,013.68	1,733.68	697.73
Interest	817.27	742.90	495.00	665.58
Sinking Fund	100.00	.....	.....	.....
Other debt reduction	3,000.00	8,000.00	1,000.00	.....
Miscellaneous purposes	204.00	599.53	97.52	104.25
Total	\$15,759.87	\$20,258.61	\$18,042.46	\$12,251.56
Balance at end of year	2,433.22	2,298.62	4,913.52	2,161.17
Grand total	\$18,193.09	\$22,557.23	\$22,955.98	\$14,412.67

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order
of population—1920 census

<i>Population 1920 census:</i>	Bethlehem 536	Sherman 533	Killingworth 531	Morris 499
Receipts:				
Taxes:				
Local sources	\$8,663.59	\$6,843.81	\$7,067.38	\$11,276.59
Certain shares of stock ..	172.68	129.16	.....	40.35
Estate penalty	174.40	.....	.....	.....
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	.....	.....	156.25
Charities .....	.....	.....	.....	.....
Schools	1,026.96	3,965.47	2,770.28	5,132.88
Licenses	243.51	184.87	271.52	179.06
Court fines and penalties ...	21.15	114.92	2.00	.....
Temporary and other loans..	4,800.00	2,000.00	2,460.65	6,000.00
Miscellaneous sources	144.76	49.00	35.00	70.17
Total	\$15,847.05	\$13,287.23	\$12,606.83	\$22,855.30
Balance at beginning of year	543.49	878.26	1,800.41	2,831.26
Grand total	\$16,390.54	\$14,165.49	\$14,407.24	\$25,686.56
Expenditures:				
Salaries	\$685.83	\$433.00	\$50.00	\$843.06
Other administrative expenses	1,221.01	311.62	428.50	557.86
Roads and bridges	1,856.64	3,686.14	2,273.33	4,515.36
Judicial	75.46	.....	.....	767.50
Charities	438.71	1,294.95	214.58	394.85
Schools	5,461.25	4,302.24	6,892.19	6,806.78
Police .....	.....	.....	.....	.....
Recreation	49.50	.....	.....	.....
Fire department .....	.....	.....	75.20	.....
Sanitation and health	88.96	14.00	84.50	.....
Public buildings	249.06	15.07	.....	120.95
Water works and supply ...	.....	.....	.....	.....
Taxes	858.27	647.92	751.04	1,137.23
Interest	792.27	511.03	259.33	247.37
Sinking Fund .....	.....	.....	685.76	.....
Other debt reduction	3,800.00	.....	1,000.00	6,000.00
Miscellaneous purposes	166.57	1,192.13	444.08	772.01
Total	\$15,743.53	\$12,408.10	\$13,158.51	\$22,162.97
Balance at end of year	647.01	1,757.39	1,248.73	3,523.59
Grand total	\$16,390.54	\$14,165.49	\$14,407.24	\$25,686.56

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

<i>Population 1920 census:</i>	Eastford 496	Colebrook 492	Bridgewater 481	Hampton 475
Receipts:				
Taxes:				
Local sources	\$8,091.40	\$13,756.00	\$8,069.94	\$9,316.14
Certain shares of stock ..	.....	13.34	94.74	49.87
Estate penalty .....	.....	6.80	151.30	85.28
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges	23.25	302.80	176.91	.....
Charities	660.14	.....	.....	28.00
Schools	2,492.46	3,625.54	3,550.35	2,014.90
Licenses .....	.....	155.51	58.43	54.70
Court fines and penalties ...	23.90	32.31	20.76	49.96
Temporary and other loans..	.....	.....	.....	1,500.00
Miscellaneous sources	66.32	212.90	145.50	306.41
Total	\$11,357.47	\$18,105.20	\$12,267.93	\$13,404.96
Balance at beginning of year	2,371.05	6,540.23	3,104.84	869.83
Grand total	\$13,728.52	\$24,645.43	\$15,372.77	\$14,274.79
Expenditures:				
Salaries	\$364.68	\$569.00	\$775.00	\$444.92
Other administrative expenses	254.12	903.51	703.56	120.30
Roads and bridges	2,592.61	8,390.61	3,291.55	3,177.65
Judicial	21.65	30.26	45.26	75.54
Charities	391.33	475.06	97.30	673.12
Schools	6,604.17	6,973.12	4,082.29	5,564.78
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	.....	.....
Fire department	50.00	.....	.....	.....
Sanitation and health .....	.....	.....	.....	.....
Public buildings .....	.....	.....	.....	116.00
Water works and supply ...	.....	.....	.....	.....
Taxes	337.07	987.75	572.26	303.32
Interest	611.88	732.00	692.84	167.57
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction .....	.....	.....	.....	1,500.00
Miscellaneous purposes	44.75	484.64	3.84	271.65
Total	\$11,472.26	\$19,545.95	\$10,283.90	\$12,616.85
Balance at end of year	2,256.26	5,099.48	5,108.87	1,657.94
Grand total	\$13,728.52	\$24,645.43	\$15,372.77	\$14,274.79

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

<i>Population 1920 census:</i>	New Fairfield 468	Bolton 448	Hartland 448	Salem 424
Receipts:				
Taxes:				
Local sources	\$11,190.85	\$7,732.98	\$7,663.94	\$9,689.98
Certain shares of stock ..	78.88	678.40	32.24	37.33
Estate penalty .....	.....	.....	33.86	.....
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	.....	690.00	.....
Charities .....	.....	.....	.....	.....
Schools	3,536.67	3,062.74	5,392.27	1,814.54
Licenses	157.49	134.13	147.30	.....
Court fines and penalties ...	50.53	3.00	.....	12.00
Temporary and other loans..	2,000.00	.....	.....	.....
Miscellaneous sources	259.46	47.35	.....	3.05
Total	\$17,273.88	\$12,258.60	\$13,959.61	\$11,556.90
Balance at beginning of year	3,248.79	3,275.78	1,593.29	1,621.31
Grand total	\$20,522.67	\$15,534.38	\$15,552.90	\$13,178.21
Expenditures:				
Salaries	\$735.60	\$845.55	\$647.13	\$105.00
Other administrative expenses	318.03	135.11	186.62	272.95
Roads and bridges	6,262.34	2,542.27	2,885.63	1,623.15
Judicial	52.50	.....	.....	.....
Charities	517.16	102.95	546.54	110.29
Schools	3,917.61	4,190.00	6,356.27	5,179.01
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	.....	.....
Fire department .....	.....	65.80	.....	6.40
Sanitation and health .....	.....	.....	.....	.....
Public buildings	58.00	75.00	.....	25.00
Water works and supply ...	.....	.....	.....	.....
Taxes	993.82	782.11	510.18	749.99
Interest	390.33	202.22	.....	617.78
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction	2,000.00	500.00	.....	.....
Miscellaneous purposes	189.85	682.08	277.89	81.28
Total	\$15,435.24	\$10,128.09	\$11,410.26	\$8,870.85
Balance at end of year	5,087.43	5,411.29	4,142.64	4,307.36
Grand total	\$20,522.67	\$15,534.38	\$15,552.90	\$13,178.21

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order
of population—1920 census

<i>Population 1920 census:</i>	Bethany 411	Hootland 391	Andover 389	Chaplin 385
Receipts:				
Taxes:				
Local sources	\$9,495.42	\$6,374.08	\$6,654.07	\$5,042.87
Certain shares of stock ..	128.88	71.32	1,446.41	154.75
Estate penalty .....	.....	112.56	.....	.....
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	.....	.....	.....
Charities .....	.....	208.29	.....	72.60
Schools	1,041.72	3,468.49	2,316.71	2,244.52
Licenses	173.19	30.09	113.21	87.53
Court fines and penalties ...	44.16	.....	23.93	22.45
Temporary and other loans..	1,000.00	1,000.00	.....	.....
Miscellaneous sources	320.24	221.61	189.08	27.57
Total	\$12,203.61	\$12,086.44	\$10,743.41	\$7,652.09
Balance at beginning of year	5,374.97	2,711.99	563.36	2,295.88
Grand total	\$17,578.58	\$14,798.43	\$11,306.77	\$9,947.97
Expenditures:				
Salaries	\$1,017.42	\$272.15	\$385.70	\$206.50
Other administrative expenses	285.29	187.53	211.49	450.85
Roads and bridges	2,777.03	1,184.50	1,730.46	1,356.68
Judicial	83.94	.....	23.93	173.19
Charities	363.16	561.32	253.88	320.29
Schools	4,881.96	5,651.07	2,691.17	3,181.26
Police	20.40	.....	.....	.....
Recreation .....	.....	.....	.....	.....
Fire department .....	.....	.....	.....	17.70
Sanitation and health .....	.....	3.00	15.00	.....
Public buildings	754.51	45.20	.....	93.00
Water works and supply ...	.....	.....	.....	.....
Taxes	722.36	366.41	646.83	359.89
Interest	408.03	273.79	221.75	96.50
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction	1,000.00	4,025.91	.....	2,000.00
Miscellaneous purposes	1,530.98	133.62	234.19	328.24
Total	\$13,795.08	\$12,664.50	\$6,413.90	\$8,584.10
Balance at end of year	3,783.50	2,133.93	4,892.87	1,363.87
Grand total	\$17,578.58	\$14,798.43	\$11,306.77	\$9,947.97

RECEIPTS AND EXPENDITURES OF TOWNS

For fiscal year ended next prior to October 11, 1920, arranged in order of population—1920 census

<i>Population 1920 census:</i>	Warren 350	Marlborough 803	Prospect 266	Union 257
Receipts:				
Taxes:				
Local sources	\$6,585.68	\$4,960.25	\$11,123.32	\$7,724.12
Certain shares of stock ..	7.56	27.21	26.03	20.15
Estate penalty .....	.....	.....	8.00	.....
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	.....	.....	.....
Charities .....	.....	62.85	60.00	.....
Schools	3,394.80	1,051.24	2,717.10	1,597.09
Licenses	58.33	81.30	220.08	94.01
Court fines and penalties ...	.....	.....	85.00	44.23
Temporary and other loans..	.....	.....	1,000.00	4,979.18
Miscellaneous sources	6.22	61.17	57.81	88.78
Total	\$10,052.59	\$6,244.02	\$15,297.34	\$14,547.56
Balance at beginning of year	2,122.57	2,234.39	1,681.22	1,373.69
Grand total	\$12,175.16	\$8,478.41	\$16,978.56	\$15,921.25
Expenditures:				
Salaries	\$295.93	\$80.00	\$278.21	\$387.10
Other administrative expenses	272.28	464.63	450.42	626.72
Roads and bridges	2,480.05	1,569.92	2,014.49	2,673.69
Judicial .....	.....	.....	.....	.....
Charities	291.01	177.93	950.10	638.79
Schools	4,820.22	3,247.36	7,794.85	3,708.41
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	2.50	.....
Fire department .....	.....	.....	15.00	.....
Sanitation and health	48.75	.....	.....	.....
Public buildings .....	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Taxes	649.22	259.10	393.37	553.51
Interest	285.00	183.17	25.00	405.47
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction .....	.....	300.00	1,000.00	6,255.18
Miscellaneous purposes	136.60	95.66	888.48	75.85
Total	\$9,279.06	\$6,377.77	\$13,312.42	\$15,819.92
Balance at end of year	2,896.10	2,100.64	3,666.14	101.33
Grand total	\$12,175.16	\$8,478.41	\$16,978.56	\$15,921.25

RECEIPTS AND EXPENDITURES OF FIRE DISTRICTS

For fiscal year ended next prior to October 11, 1920, arranged in order of estimated population

	Manchester South Manchester 12,000	Essexfield Thompsonville Fire and Sewer 8,500	Stonington and Groton Mystic 4,500	Stonington Pawcatuck 4,000
<i>Estimated population:</i>				
Receipts:				
Taxes:				
Local sources	\$45,639.75	\$4,320.99	\$9,860.02	\$7,326.30
Certain shares of stock ..	1,750.39	158.63	225.41	.....
Special street assessments ..	.....	8,957.61	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	.....	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Licenses .....	.....	.....	.....	.....
Court fines and penalties ...	.....	.....	.....	.....
Temporary and other loans..	300.00	.....	2,000.00	4,000.00
Miscellaneous sources	900.88	40.69	68.20	31.68
Total	\$48,591.02	\$13,486.92	\$12,153.63	\$11,857.98
Balance at beginning of year	253.08	1,545.38	1,365.26	1,288.21
Grand total	\$48,844.10	\$15,032.30	\$13,518.89	\$12,646.19
Expenditures:				
Salaries .....	.....	\$635.00	\$346.39	\$335.00
Other administrative expenses	.....	157.48	252.61	113.08
Roads and bridges .....	.....	8,986.85	2,723.44	3,065.77
Judicial .....	.....	.....	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	.....	.....
Fire department	\$18,001.80	2,449.50	4,012.99	3,102.04
Sanitation and health .....	.....	150.00	.....	.....
Public buildings .....	.....	.....	.....	178.32
Water works and supply ...	.....	.....	2,094.33	.....
Taxes .....	.....	.....	.....	.....
Interest	390.84	27.46	625.00	400.02
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction	21,800.00	1,000.00	.....	4,500.00
Miscellaneous purposes	13.38	.....	.....	182.65
Total	\$40,205.97	\$13,406.29	\$10,054.78	\$11,876.88
Balance at end of year	8,638.13	1,626.01	3,464.13	769.31
Grand total	\$48,844.10	\$15,032.30	\$13,518.89	\$12,646.19

RECEIPTS AND EXPENDITURES OF FIRE DISTRICTS

For fiscal year ended next prior to October 11, 1920, arranged in order
of estimated population

	Windsor 8,700	West Hartford Center 8,600	New Milford Association 8,000	Watertown Oakville 2,500
<i>Estimated population:</i>				
Receipts:				
Taxes:				
Local sources	\$5,015.88	\$9,211.85	\$5,934.45	\$1,845.94
Certain shares of stock ..	.....	983.68	.....	1.04
Special street assessments ..	416.34	.....	.....	.....
Water works and supply ...	16,886.28	.....	500.00	.....
Roads and bridges .....	.....	.....	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Licenses .....	.....	.....	.....	.....
Court fines and penalties ...	.....	.....	.....	.....
Temporary and other loans..	.....	.....	1,500.00	.....
Miscellaneous sources	50.40	325.40	582.66	4.00
Total	\$22,368.90	\$10,520.43	\$8,517.11	\$1,850.98
Balance at beginning of year	1,146.59	6,144.07	441.61	596.88
Grand total	\$23,515.49	\$16,664.50	\$8,958.72	\$2,447.86
Expenditures:				
Salaries	\$200.01	.....	\$120.00	.....
Other administrative expenses	472.54	\$650.00	34.77	\$81.70
Roads and bridges .....	.....	.....	3,105.00	960.00
Judicial .....	.....	.....	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Police .....	.....	.....	984.00	.....
Recreation .....	.....	.....	.....	.....
Fire department	324.62	7,082.01	942.98	.....
Sanitation and health	636.76	.....	.....	.....
Public buildings .....	.....	.....	.....	.....
Water works and supply ...	9,681.26	.....	1,680.00	.....
Taxes .....	.....	.....	.....	.....
Interest	9,202.37	.....	60.00	.....
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction	2,000.00	.....	1,530.30	.....
Miscellaneous purposes ....	.....	.....	.....	.....
Total	\$22,517.56	\$7,732.01	\$8,457.05	\$1,041.70
Balance at end of year	997.93	8,932.49	501.67	1,406.16
Grand total	\$23,515.49	\$16,664.50	\$8,958.72	\$2,447.86

RECEIPTS AND EXPENDITURES OF FIRE DISTRICTS

For fiscal year ended next prior to October 11, 1920, arranged in order of estimated population

	West Hartford South 2,500	Wethersfield 2,500	Watertown 2,000	Westport 2,000
<i>Estimated population:</i>				
Receipts:				
Taxes:				
Local sources	\$5,635.12	\$4,016.88	\$4,055.14	\$4,652.04
Certain shares of stock ..	318.56	.....	95.44	.....
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	8.72	9,016.71	.....
Roads and bridges .....	.....	4,122.85	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Licenses .....	.....	.....	.....	.....
Court fines and penalties ...	.....	.....	.....	.....
Temporary and other loans ..	3,000.00	1,000.00	.....	900.00
Miscellaneous sources	106.00	17.85	104.24	82.40
Total	\$9,059.68	\$9,166.30	\$13,271.53	\$5,634.44
Balance at beginning of year	1,696.02	798.05	2,577.43	1,749.32
Grand total	\$10,745.70	\$9,964.35	\$15,848.96	\$7,383.76
Expenditures:				
Salaries .....	.....	.....	\$489.99	\$15.00
Other administrative expenses	.....	\$492.44	121.97	219.96
Roads and bridges .....	.....	4,489.46	2,221.64	.....
Judicial .....	.....	.....	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	.....	.....
Fire department	\$3,411.23	272.45	864.00	1,394.67
Sanitation and health .....	.....	.....	.....	141.07
Public buildings .....	.....	.....	.....	.....
Water works and supply ...	.....	670.22	6,816.48	1,926.25
Taxes .....	.....	.....	.....	.....
Interest	53.00	910.27	344.94	1,274.75
Sinking Fund .....	.....	755.60	.....	.....
Other debt reduction .....	.....	1,650.00	.....	.....
Miscellaneous purposes ....	.....	73.50	.....	24.25
Total	\$3,464.23	\$9,313.94	\$10,859.02	\$4,906.15
Balance at end of year	7,281.47	650.41	4,989.94	2,387.61
Grand total	\$10,745.70	\$9,964.35	\$15,848.96	\$7,383.76

RECEIPTS AND EXPENDITURES OF FIRE DISTRICTS

For fiscal year ended next prior to October 11, 1920, arranged in order
of estimated population

	East Hartford Meadow 1,800	Farmington Unionville 1,800	West Hartford East Side 1,700	East Hampton 1,600
<i>Estimated population:</i>				
Receipts:				
Taxes:				
Local sources	\$5,790.26	\$4,806.48	\$10,648.50	\$8,305.81
Certain shares of stock ..	5.01	233.07	9,975.70	.....
Special street assessments ..	.....	.....	.....	.....
Water works and supply ..	.....	.....	.....	.....
Roads and bridges .....	.....	.....	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Licenses .....	.....	.....	.....	.....
Court fines and penalties ...	.....	.....	.....	.....
Temporary and other loans..	5,000.00	.....	1,200.00	.....
Miscellaneous sources .....	.....	34.55	368.09	10.30
Total	\$10,795.27	\$5,074.10	\$22,192.29	\$8,315.61
Balance at beginning of year	665.88	876.03	13,648.53	599.83
Grand total	\$11,461.15	\$5,950.13	\$35,840.82	\$8,915.44
Expenditures:				
Salaries	\$100.00	\$835.28	\$300.00	\$100.00
Other administrative expenses	218.76	.....	177.65	37.00
Roads and bridges .....	.....	1,825.65	.....	2,293.09
Judicial .....	.....	.....	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	.....	.....
Fire department	8,850.84	1,239.90	14,261.49	.....
Sanitation and health .....	.....	.....	7,022.25	.....
Public buildings .....	.....	750.00	.....	.....
Water works and supply ...	.....	722.00	.....	.....
Taxes .....	.....	.....	.....	.....
Interest	300.00	270.00	.....	.....
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction	1,500.00	.....	4,700.00	.....
Miscellaneous purposes ....	.....	.....	23.63	.....
Total	\$10,964.60	\$5,142.83	\$26,485.02	\$2,430.09
Balance at end of year	496.55	807.80	9,855.80	1,485.35
Grand total	\$11,461.15	\$5,950.13	\$35,840.82	\$8,915.44

RECEIPTS AND EXPENDITURES OF FIRE DISTRICTS

For fiscal year ended next prior to October 11, 1920, arranged in order
of estimated population

	Orange Allingtown 1,500	Glastonbury South Glastonbury 1,500	Buffield 1,500	Orange West Shore 1,200
<i>Estimated population:</i>				
Receipts:				
Taxes:				
Local sources	\$1,805.46	.....	.....	\$3,030.65
Certain shares of stock ..	.....	.....	.....	.....
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	.....	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Licenses .....	.....	.....	.....	.....
Court fines and penalties ...	.....	.....	.....	.....
Temporary and other loans..	.....	\$300.00	.....	3,000.00
Miscellaneous sources .....	.....	.....	\$131.16	.....
Total	\$1,805.46	\$300.00	\$131.16	\$6,030.65
Balance at beginning of year	1,078.33	65.73	5,079.60	.....
Grand total	\$2,878.79	\$365.73	\$5,210.76	\$6,030.65
Expenditures:				
Salaries	\$110.00	.....	.....	.....
Other administrative expenses	.....	.....	\$4.00	\$566.21
Roads and bridges .....	.....	\$327.84	1,447.78	.....
Judicial .....	.....	.....	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	.....	.....
Fire department	1,540.42	.....	465.65	3,200.40
Sanitation and health .....	.....	.....	.....	.....
Public buildings .....	.....	.....	480.72	.....
Water works and supply ...	280.00	.....	.....	650.00
Taxes .....	.....	.....	.....	.....
Interest .....	.....	4.66	.....	.....
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction .....	.....	.....	.....	.....
Miscellaneous purposes ....	.....	.....	.....	.....
Total	\$1,930.42	\$332.00	\$2,398.10	\$4,416.61
Balance at end of year	948.87	33.73	2,812.66	1,614.04
Grand total	\$2,878.79	\$365.73	\$5,210.76	\$6,030.65

RECEIPTS AND EXPENDITURES OF FIRE DISTRICTS

For fiscal year ended next prior to October 11, 1920, arranged in order
of estimated population

	North Canaan Canaan	New Hartford Village	East Windsor Warehouse Point	Wethersfield Wolcott Mill
<i>Estimated population:</i>	1,000	1,000	1,000	1,000
Receipts:				
Taxes:				
Local sources	\$2,719.72	\$2,152.12	\$1,440.29	\$2,983.88
Certain shares of stock ..	.....	.....	.....	.....
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	3,150.92
Roads and bridges .....	.....	.....	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Licenses .....	.....	.....	.....	.....
Court fines and penalties ...	.....	.....	.....	.....
Temporary and other loans..	.....	.....	.....	1,000.00
Miscellaneous sources	125.10	.....	.....	.....
Total	\$2,844.82	\$2,152.12	\$1,440.29	\$7,134.80
Balance at beginning of year	2,137.98	1,209.97	416.22	.....
Grand total	\$4,982.80	\$3,362.09	\$1,856.51	\$7,134.80
Expenditures:				
Salaries	\$15.00	.....	.....	.....
Other administrative expenses	.....	.....	\$177.47	\$64.90
Roads and bridges .....	.....	\$1,154.62	.....	.....
Judicial .....	.....	.....	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	.....	.....
Fire department	100.00	1,043.11	235.76	.....
Sanitation and health	2,000.84	.....	885.19	.....
Public buildings .....	.....	.....	.....	.....
Water works and supply ...	.....	.....	390.00	3,791.04
Taxes .....	.....	.....	.....	.....
Interest	585.00	25.50	70.00	1,306.57
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction .....	.....	.....	.....	.....
Miscellaneous purposes ....	.....	.....	47.28	.....
Total	\$2,700.84	\$2,223.23	\$1,805.70	\$5,162.51
Balance at end of year	2,281.96	1,138.86	50.81	1,972.29
Grand total	\$4,982.80	\$3,362.09	\$1,856.51	\$7,134.80

RECEIPTS AND EXPENDITURES OF FIRE DISTRICTS

For fiscal year ended next prior to October 11, 1920, arranged in order of estimated population

	Salisbury Lakeville	Simsbury Tarisville	Enfield Hazardville	East Haddam Woodus
<i>Estimated population:</i>	900	850	800	800
Receipts:				
Taxes:				
Local sources	\$3,378.59	\$711.47	\$1,105.73	\$925.65
Certain shares of stock ..	456.00	.....	.....	.....
Special street assessments ..	272.60	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	.....	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Licenses .....	.....	.....	.....	.....
Court fines and penalties ...	.....	.....	.....	.....
Temporary and other loans..	.....	.....	.....	.....
Miscellaneous sources	443.50	.....	15.00	.....
Total	\$4,550.69	\$711.47	\$1,120.73	\$925.65
Balance at beginning of year	\$40.17	.....	337.37	84.42
Grand total	\$4,890.86	\$711.47	\$1,458.10	\$1,010.07
Expenditures:				
Salaries .....	.....	\$22.00	.....	\$73.15
Other administrative expenses	\$97.87	.....	.....	.....
Roads and bridges	954.00	589.29	.....	780.00
Judicial .....	.....	.....	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	.....	.....
Fire department	1,045.56	.....	\$159.06	.....
Sanitation and health	1,008.93	.....	.....	.....
Public buildings .....	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Taxes .....	.....	.....	.....	.....
Interest	1,910.54	.....	.....	.....
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction	250.00	.....	.....	.....
Miscellaneous purposes	125.00	.....	.....	.....
Total	\$4,500.90	\$611.29	\$159.06	\$853.15
Balance at end of year	389.96	100.18	1,299.04	156.92
Grand total	\$4,890.86	\$711.47	\$1,458.10	\$1,010.07

RECEIPTS AND EXPENDITURES OF FIRE DISTRICTS

For fiscal year ended next prior to October 11, 1920, arranged in order
of estimated population

<i>Estimated population:</i>	Brooklyn 750	Haddam Nigganum 700	Enfield North Thompsonville 650	Sharon 600
Receipts:				
Taxes:				
Local sources	\$1,348.43	\$1,333.94	\$253.19	\$1,445.62
Certain shares of stock ..	24.19	.....	8.50	.....
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	.....	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Licenses .....	.....	.....	.....	.....
Court fines and penalties ...	.....	.....	.....	.....
Temporary and other loans..	850.00	180.00	.....	.....
Miscellaneous sources .....	.....	.....	.....	.....
Total	\$2,222.62	\$1,513.94	\$266.69	\$1,445.62
Balance at beginning of year	36.20	109.27	147.29	749.51
Grand total	\$2,258.82	\$1,623.21	\$413.98	\$2,195.13
Expenditures:				
Salaries .....	.....	.....	.....	\$58.00
Other administrative expenses	\$15.30	\$51.01	\$20.00	90.00
Roads and bridges	768.00	1,080.00	.....	931.78
Judicial .....	.....	.....	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	.....	.....
Fire department	92.00	.....	16.40	59.02
Sanitation and health .....	.....	.....	.....	.....
Public buildings .....	.....	.....	.....	.....
Water works and supply ...	270.00	.....	.....	400.00
Taxes .....	.....	.....	.....	.....
Interest	69.06	3.15	30.00	.....
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction	950.00	180.00	100.00	.....
Miscellaneous purposes ....	.....	.....	.....	11.63
Total	\$2,165.26	\$1,314.16	\$166.40	\$1,550.43
Balance at end of year	93.56	309.05	247.58	644.70
Grand total	\$2,258.82	\$1,623.21	\$413.98	\$2,195.13

RECEIPTS AND EXPENDITURES OF FIRE DISTRICTS

For fiscal year ended next prior to October 11, 1920, arranged in order
of estimated population

	Windsor Wilson 535	Enfield No. 1 500	New Hartford Fine Meadow 500	Glastonbury 350
<i>Estimated population:</i>				
Receipts:				
Taxes:				
Local sources .....	.....	.....	\$852.96	\$892.58
Certain shares of stock ..	.....	.....	.....	386.85
Special street assessments ..	\$1,211.36	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	.....	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Licenses .....	.....	.....	.....	.....
Court fines and penalties ...	.....	.....	.....	.....
Temporary and other loans..	5,000.00	.....	.....	1,500.00
Miscellaneous sources	131.76	\$50.00	1.75	.....
Total	\$6,343.12	\$50.00	\$854.71	\$2,779.43
Balance at beginning of year	696.63	64.81	300.84	464.02
Grand total	\$7,039.75	\$114.81	\$1,155.55	\$3,243.45
Expenditures:				
Salaries .....	.....	.....	\$25.82	\$39.77
Other administrative expenses	\$174.60	\$10.43	104.15	146.91
Roads and bridges .....	.....	.....	385.00	492.84
Judicial .....	.....	.....	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	.....	.....
Fire department .....	.....	59.15	.....	553.73
Sanitation and health	2,824.35	.....	.....	.....
Public buildings .....	.....	.....	.....	.....
Water works and supply ...	.....	.....	400.00	.....
Taxes .....	.....	.....	.....	.....
Interest	636.67	12.00	.....	135.07
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction	3,000.00	.....	.....	300.00
Miscellaneous purposes	28.00	.....	.....	1,131.40
Total	\$6,663.62	\$81.58	\$914.97	\$2,804.72
Balance at end of year	376.13	33.23	240.58	438.73
Grand total	\$7,039.75	\$114.81	\$1,155.55	\$3,243.45

RECEIPTS AND EXPENDITURES OF FIRE DISTRICTS

For fiscal year ended next prior to October 11, 1920, arranged in order
of estimated population

	Glastonbury Naubuc 350	Thompson No. 4 350	Kent 269	Granby Salmon Brook Lighting Dist. 267
<i>Estimated population:</i>				
Receipts:				
Taxes:				
Local sources	\$823.66	\$9.00	\$514.18	\$957.92
Certain shares of stock ..	17.57	.....	.....	119.03
Special street assessments ..	.....	.....	100.00	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	.....	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Licenses .....	.....	.....	.....	.....
Court fines and penalties ...	.....	.....	.....	.....
Temporary and other loans..	.....	.....	.....	.....
Miscellaneous sources .....	.....	.....	.....	.....
Total	\$841.23	\$9.00	\$614.18	\$1,076.95
Balance at beginning of year	120.13	87.18	117.36	135.55
Grand total	\$961.36	\$46.18	\$731.54	\$1,212.50
Expenditures:				
Salaries .....	.....	\$3.00	.....	.....
Other administrative expenses	\$30.47	2.25	\$29.68	.....
Roads and bridges	819.72	.....	500.00	\$498.00
Judicial .....	.....	.....	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	.....	.....
Fire department .....	.....	.....	13.00	300.00
Sanitation and health .....	.....	.....	.....	.....
Public buildings .....	.....	.....	.....	.....
Water works and supply ...	.....	.....	75.00	.....
Taxes .....	.....	.....	.....	.....
Interest .....	.....	.....	.....	.....
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction .....	.....	.....	.....	.....
Miscellaneous purposes .....	.....	.....	.....	77.38
Total	\$850.19	\$5.25	\$617.68	\$875.38
Balance at end of year ...	111.17	40.93	118.86	337.12
Grand total	\$961.36	\$46.18	\$731.54	\$1,212.50

RECEIPTS AND EXPENDITURES OF FIRE DISTRICTS

For fiscal year ended next prior to October 11, 1920, arranged in order
of estimated population

	Glastonbury Center 235	Canaan Falls Village 225	Haddam Haddam Center 174	East Haddam 150
<i>Estimated population:</i>				
Receipts:				
Taxes:				
Local sources .....	.....	\$913.65	\$429.28	\$633.85
Certain shares of stock ..	.....	.....	.....	.....
Special street assessments ..	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Roads and bridges .....	.....	.....	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Licenses .....	.....	.....	.....	.....
Court fines and penalties ...	.....	.....	.....	.....
Temporary and other loans..	\$750.00	.....	.....	.....
Miscellaneous sources .....	.....	.....	.....	.....
Total	\$750.00	\$913.65	\$429.28	\$633.85
Balance at beginning of year	.....	559.47	11.27	162.70
Grand total	\$750.00	\$1,473.12	\$440.55	\$796.55
Expenditures:				
Salaries .....	.....	.....	\$44.13	.....
Other administrative expenses	\$15.71	\$57.43	.....	.....
Roads and bridges	364.20	648.00	267.03	.....
Judicial .....	.....	.....	.....	.....
Charities .....	.....	.....	.....	.....
Schools .....	.....	.....	.....	.....
Police .....	.....	.....	.....	.....
Recreation .....	.....	.....	.....	.....
Fire department .....	.....	103.00	.....	.....
Sanitation and health .....	.....	.....	.....	.....
Public buildings .....	.....	.....	.....	.....
Water works and supply ...	.....	.....	.....	.....
Taxes .....	.....	.....	.....	.....
Interest	14.01	.....	.....	.....
Sinking Fund .....	.....	.....	.....	.....
Other debt reduction	250.00	.....	.....	.....
Miscellaneous purposes ....	.....	.....	.....	\$480.98
Total	\$643.92	\$808.43	\$311.16	\$480.98
Balance at end of year	106.08	664.69	129.39	315.57
Grand total	\$750.00	\$1,473.12	\$440.55	\$796.55

RECEIPTS AND EXPENDITURES OF FIRE DISTRICTS

For fiscal year ended next prior to October 11, 1920, arranged in order of estimated population

	Glastonbury Addison	Glastonbury Hebron	Glastonbury Still Mill	Woodbury Oreanaug
<i>Estimated population:</i>				
Receipts:				
Taxes:				
Local sources	Organized 1919. No operations during first fiscal year.	Has not yet completed fiscal year.	Has not yet completed fiscal year.	Unable to obtain report from Fire District treasurer.
Certain shares of stock ..				
Special street assessments ..				
Water works and supply ...				
Roads and bridges				
Charities				
Schools				
Licenses				
Court fines and penalties ...				
Temporary and other loans..				
Miscellaneous sources				
Total				
Balance at beginning of year				
Grand total				
Expenditures:				
Salaries	Organized 1919. No operations during first fiscal year.	Has not yet completed fiscal year.	Has not yet completed fiscal year.	Unable to obtain report from Fire District treasurer.
Other administrative expenses				
Roads and bridges				
Judicial				
Charities				
Schools				
Police				
Recreation				
Fire department				
Sanitation and health				
Public buildings				
Water works and supply ...				
Taxes				
Interest				
Sinking Fund				
Other debt reduction				
Miscellaneous purposes				
Total				
Balance at end of year				
Grand total				

SUMMARY OF RECEIPTS AND EXPENDITURES OF COUNTIES, CITIES, BOROUGHS, TOWNS, AND FIRE DISTRICTS

	Counties	Cities	Boroughs	Towns	Fire Districts	Totals
Taxes:						
Local sources	\$281,860.03	\$19,580,773.13	\$733,540.45	\$12,006,757.77	\$162,731.23	\$82,764,662.61
Certain shares of stock	.....	996,820.98	18,464.15	404,865.29	14,759.07	1,434,909.47
Estate penalties	.....	32,227.74	15.20	80,689.98	.....	112,932.90
Special street assessments	.....	637,677.77	56,142.61	128,091.78	10,957.91	822,870.07
Water works and supply	.....	1,783,840.94	63,054.93	62,448.98	20,562.63	1,888,407.48
Labor, sales, etc., of penitentiaries	80,971.23	.....	.....	.....	.....	80,971.23
Board of prisoners	54,060.25	.....	.....	.....	.....	54,060.25
Roads and bridges	1,000.00	187,642.61	48,987.49	55,018.21	4,122.85	296,771.16
Charities	180,117.21	148,308.28	16,980.08	131,098.68	.....	470,684.28
Schools	.....	756,676.32	12,593.05	973,206.38	.....	1,746,476.76
Licenses	34.00	248,882.14	5,142.91	102,346.16	.....	356,405.20
Court fines and penalties	834.01	219,236.67	7,419.65	68,683.86	.....	286,074.18
Temporary and other loans	577,948.00	11,872,223.99	1,136,931.13	9,358,080.62	31,480.00	22,977,263.74
Municipal ice plant	.....	29,221.16	.....	.....	.....	29,221.16
Municipal lighting plant	.....	686,270.72	12,958.01	.....	.....	699,228.73
Miscellaneous sources	12,701.04	686,208.92	32,558.25	236,843.19	3,634.61	924,944.01
Total	\$1,189,534.77	\$37,662,513.32	\$2,140,965.91	\$23,603,929.86	\$257,248.30	\$64,853,892.16
Balance at beginning of year	346,966.74	3,024,206.72	87,645.73	1,590,161.41	49,839.19	5,098,819.79
Grand total	\$1,536,501.51	\$40,686,720.04	\$2,228,611.64	\$25,193,791.27	\$307,087.49	\$69,952,711.95
Expenditures:						
Salaries	\$40,537.75	\$523,962.38	\$20,718.91	\$388,128.15	\$3,367.54	\$985,714.73
Other administrative expenses	57,094.22	689,212.85	13,126.94	528,153.21	4,983.25	1,287,270.47
Roads and bridges	166,321.14	6,691,567.65	359,310.53	2,866,490.04	41,678.45	10,115,367.81
Judicial	25,450.92	194,406.98	2,242.33	31,682.64	.....	303,782.87
Charities	35,651.82	585,568.81	52,260.70	806,121.84	.....	1,870,602.97
Schools	.....	6,879,701.39	107,244.84	6,577,490.03	.....	13,564,436.26
Police	.....	2,170,617.41	68,839.29	119,188.51	984.00	2,349,574.24
Recreation	.....	1,012,248.91	41,407.09	117,417.82	.....	1,171,073.72
Fire department	.....	2,236,605.60	102,371.42	162,421.23	75,198.98	2,568,797.28
Sanitation and health	.....	1,878,588.98	80,927.17	155,021.94	14,699.39	2,127,207.48
Public buildings	237,538.45	1,873,796.50	9,714.17	643,048.52	1,400.04	2,557,505.68
Water works and supply	.....	2,161,571.15	131,282.21	57,601.42	20,846.58	2,420,301.36
Taxes	.....	1,761,011.15	19,105.22	1,022,876.47	.....	2,802,992.84
County home	274,340.07	.....	.....	.....	.....	274,340.07
County jail	364,660.88	.....	.....	.....	.....	364,660.88
County farm bureau	24,065.00	.....	.....	.....	.....	24,065.00
County	28,508.17	2,085,233.90	84,961.42	976,392.71	17,773.78	3,387,869.98
Interest	7,500.00	581,686.86	38,821.59	166,094.48	7,751.90	791,857.82
Sinking Fund	104,999.00	5,215,065.00	632,096.06	8,582,033.48	43,710.30	14,577,863.88
Other debt reduction	.....	52,487.50	.....	.....	.....	52,487.50
Municipal ice plant	.....	54,348.67	7,788.72	.....	.....	62,137.39
Municipal lighting plant	.....	367,058.57	29,429.21	328,371.87	2,210.13	700,057.77
Miscellaneous purposes	.....	397,513,116.31	\$1,804,017.84	\$23,500,370.14	\$236,206.04	\$61,700,108.74
Balance at end of year	113,000.19	2,067,300.93	123,063.80	1,663,119.11	70,701.45	3,243,615.51
Grand total	\$1,536,501.51	\$40,686,720.04	\$2,228,611.64	\$25,193,791.27	\$307,087.49	\$69,952,711.95

COMPARISON OF MUNICIPAL INDEBTEDNESS

TABLE No. 4

Population 1920 census, percentage of total net indebtedness, percentage of indebtedness excluding water debt, grand list as returned by municipality, assessed valuation of stock of banks, trust, insurance and investment companies, grand list including stock, net indebtedness, and per capita indebtedness of cities, boroughs and towns, arranged in order of percentage of total net indebtedness to grand list including stock.

CITIES	Population 1920 census	Percentage of net in- debtedness to grand list, including stock	Percentage of indebt- edness exclusive of water debt to grand list, including stock	Grand list as returned by municipality	Assessed valuation of stock of banks, trust, insurance and invest- ment companies	Grand list including stock	Net indebtedness	Per capita indebtedness
Norwich,	22,304	11.71	7.62	\$14,604,597	\$309,292	\$14,913,889	\$1,745,834.82	\$78.27
Putnam,	7,711	9.78	3.09	4,626,231	79,009	4,705,240	460,280.00	59.69
Norwalk, a	27,743	7.02	4.55	28,444,145	819,472	29,263,617	2,055,424.87	74.09
N. London, a	25,688	6.37	3.38	32,090,628	1,611,348	33,601,976	2,140,432.54	83.32
Waterbury, a	91,715	6.24	4.51	123,137,004	1,963,945	125,100,949	7,857,840.00	85.68
N. Britain, a	59,316	5.49	3.86	58,177,959	1,806,944	59,984,903	3,293,383.44	55.52
Shelton, a	9,475	4.83	....	10,083,770	182,272	10,266,042	496,355.32	52.39
Bridgeport, a	143,555	4.50	....	239,201,117	4,112,425	243,313,542	10,941,416.05	76.22
Danbury,	18,943	4.10	3.07	20,750,000	....	....	851,147.12	44.93
Bristol, a	20,620	3.85	1.87	23,741,334	1,430,942	25,172,276	969,472.02	47.02
Hartford, a	138,036	3.63	2.24	170,813,891	102,617,948	273,431,839	9,526,645.00	71.98
New Haven, a	162,537	3.22	....	188,425,123	8,811,745	197,236,868	6,344,945.11	39.04
Derby, a	11,238	2.44	....	9,633,590	561,785	10,195,375	248,470.83	22.11
Middletown,	13,638	2.21	.62	12,266,613	368,217	12,634,830	278,745.29	20.44
Meriden,	29,867	2.00	1.02	23,034,292	418,058	23,452,350	470,000.00	15.74
Stamford,	35,096	1.89	....	41,229,994	....	....	777,805.72	22.16
Rockville,	7,726	1.76	....	6,730,527	1,597,371	8,327,898	146,778.86	19.00
Williamantic,	12,330	1.61	.73	14,064,711	108,210	14,172,921	228,526.30	18.53
Ansonia, a	17,643	1.34	....	19,627,735	847,977	20,475,712	275,064.11	15.59
BOROUGHS								
E. Hartford, b	8,000c	9.53	....	\$6,700,000	\$183,227	\$6,883,227	\$655,735.39	\$81.97
Groton,	4,236	7.89	.60	5,000,000	34,230	5,034,230	397,000.00	93.72
Greenwich,	5,939	5.90	....	8,248,017	....	....	487,000.00	82.00
Fenwick, d	150	4.46	....	176,010	....	....	7,850.00	52.33
New Canaan,	1,918	4.27	....	1,990,900	....	....	84,966.37	44.30
Jewett City,	3,196	3.80	....	1,884,029	30,891	1,914,920	72,764.34	22.77
Wallingford,	9,648	3.06	2.70	12,479,967	52,096	12,532,063	383,102.15	39.71
Southington,	5,085	2.89	....	4,102,329	97,452	4,199,781	121,525.98	23.90
Danielson,	3,130	2.37	....	2,522,862	50,370	2,573,232	61,100.00	19.52
Stonington,	2,100	2.37	....	754,985	25,515	780,500	18,500.00	8.81
Ridgefield,	1,030	2.18	....	2,160,183	....	....	47,010.92	45.64
Torrington,	20,623	1.31	....	24,457,779	695,536	25,153,315	329,527.28	15.98
Naugatuck, e	15,051	1.24	....	12,396,325	3,768,551	16,160,876	200,033.71	13.29
Litchfield,	707	.96	....	2,516,244	44,465	2,560,709	24,500.00	34.65
Stafford Spr'gs,	3,383	.38	....	3,833,940	156,831	3,990,771	15,000.00	4.43
Guilford,	1,612	.26	....	1,382,758	....	....	3,600.00	2.28
Farmington,	1,021	.11	....	2,316,582	273,085	2,589,667	2,886.73	2.83
BOROUGHS HAVING NO DEBT								
Bantam,	608	....	....	\$512,840	\$951	\$513,791	....	....
Branford,	2,619	....	....	1,763,703	....	....	....	....
Colchester,	913	....	....	388,366	13,258	401,624	....	....
Newtown,	426	....	....	565,575	....	....	....	....
Woodmont,	220	....	....	1,291,594	....	....	....	....

a Town and city governments consolidated.

b Fire district of East Hartford has all the powers of a borough.

c Estimate of fire district clerk.

d A summer colony, only 13 winter inhabitants.

e Borough and town governments consolidated.

COMPARISON OF MUNICIPAL INDEBTEDNESS

TOWNS	Population 1920 census	Percentage of net in- debtedness to grand list, including stock	Grand list as returned by municipality	Assessed valuation of stock of banks, trust, insurance and invest- ment companies	Grand list including stock	Net indebtedness	Per capita indebtedness
42 Stratford,	12,347	7.35	\$15,168,956	\$263,535	\$15,432,491	\$1,134,743.35	\$91.90
43 Eastford,	496	7.19	267,665	.....	.....	19,258.00	38.83
44 Lisbon,	867	6.67	450,942	25,035	475,978	31,757.78	36.63
45 Barkhamsted,	719	6.37	427,970	17,536	465,506	29,000.00	40.33
46 Voluntown,	656	6.37	269,176	.....	.....	17,155.23	26.15
47 Waterford,	3,935	6.24	2,712,361	558,852	3,271,213	204,232.87	51.90
48 North Stonington,	1,144	6.08	659,653	16,139	675,792	41,082.51	35.91
49 Lyme,	674	5.99	664,872	44,204	709,076	42,498.60	63.05
50 Sprague,	2,500	5.08	2,764,507	23,505	2,788,012	141,640.54	56.66
51 Harwinton,	2,020	5.06	1,266,704	11,708	1,278,412	64,633.60	32.00
52 Rocky Hill,	1,633	5.06	1,326,779	10,023	1,354,801	68,518.22	41.96
53 Portland,	3,644	5.04	3,322,122	402,312	3,724,934	187,600.00	51.48
54 Preston,	2,743	5.04	1,055,419	9,988	1,064,405	53,637.21	19.55
55 Bethel,	3,201	4.99a	2,293,180	22,072	2,315,252	115,429.66	36.06
56 Hebron,	915	4.75	578,297	26,760	605,057	28,767.71	31.44
57 Southbury,	1,093	4.54	912,104	33,712	945,816	42,898.91	39.25
58 Orange,	16,614	4.23	20,426,609	200,485	20,627,094	833,470.76	53.18
59 Stonington,	10,236	4.27	7,307,401	463,737	7,771,138	331,784.91	32.46
60 Tolland,	1,040	4.23	753,014	44,059	797,073	33,700.00	32.46
61 Killingly,	8,178	4.16	5,938,129	289,249	6,227,378	259,297.05	31.71
62 Mansfield,	2,574	4.14	1,606,962	62,166	1,669,128	64,884.34	25.21
63 Milford,	10,193	4.05	13,373,483	237,681	13,611,164	551,200.00	54.08
64 Middletown,	22,129	4.01	17,806,871	1,382,922	19,189,793	768,650.96	34.74
65 Marlborough,	303	3.94	182,717	2,961	185,678	7,324.79	24.17
66 Trumbull,	2,597	3.93	2,677,212	190,226	2,867,438	112,639.88	43.37
67 Griswold,	4,220	3.92	2,704,545	122,346	2,826,891	111,000.00	26.39
68 Wallingford,	12,010	3.86	15,314,887	230,002	15,544,889	600,677.92	50.01
69 Southington,	8,440	3.67b	7,199,757	475,815	7,675,572	281,457.93	33.25
70 Putnam,	8,397	3.66	5,549,416	211,306	5,760,722	210,720.34	25.09
71 North Canaan,	1,923	3.65	1,533,388	97,757	1,631,145	59,564.60	30.81
72 Newington,	2,381	3.55	2,648,376	119,941	2,768,317	98,304.22	41.29
73 Oxford,	998	3.54	1,002,175	8,074	1,010,249	35,746.00	35.82
74 Westport,	5,114	3.47	9,840,074	189,975	10,030,049	347,592.61	67.97
75 East Hartford,	11,648	3.38	11,556,275	616,035	12,172,310	411,156.88	35.20
76 Windham,	13,801	3.32	15,622,881	542,082	16,164,963	537,473.01	38.94
77 Torrington,	22,055	3.25	26,041,982	775,533	26,817,515	872,552.97	39.57
78 Salem,	424	3.25	360,751	3,753	364,504	11,863.04	27.98
79 Weston,	703	3.21	511,311	3,252	514,563	16,543.00	23.53
80 Winchester,	9,019	3.21c	8,716,641	748,691	9,465,332	308,438.27	33.64
81 Brooklyn,	1,655	3.16	1,499,100	101,865	1,600,965	50,585.55	30.57
82 Sherman,	533	3.13	411,462	16,638	428,000	13,386.28	25.11
83 Glastonbury,	5,592	3.08	4,183,396	474,564	4,657,960	143,451.93	25.85
84 Bridgewater,	481	3.06	491,766	11,401	503,167	15,400.00	32.02
85 New Canaan,	3,895	3.05	7,371,761	101,159	7,472,920	228,052.67	58.77
86 North Branford,	1,110	3.05	1,002,975	13,201	1,016,176	31,000.00	27.91
87 Woodbury,	1,698	3.01	1,512,217	88,590	1,600,807	48,182.07	28.38
88 Saybrook,	2,325	2.99	1,764,815	197,414	1,962,229	58,612.64	25.21
89 Columbia,	706	2.97	488,633	9,079	497,712	14,788.88	20.94
90 Old Saybrook,	1,463	2.88	1,508,401	36,655	1,545,056	44,538.86	30.44
91 East Hampton,	2,394	2.86	2,661,096	144,538	2,805,634	80,235.84	33.52
92 Greenwich,	22,123	2.84	51,782,707	851,916	52,634,623	1,492,200.00	67.47
93 Windsor Locks,	3,554	2.76	4,873,000	758,984	5,631,984	155,170.72	43.60
94 Colchester,	2,060	2.75	944,997	71,936	1,016,933	28,000.00	13.60
95 Darien,	4,184	2.71	7,451,572	155,181	7,606,753	206,250.00	49.27
96 Groton,	9,227	2.70	8,925,063	274,830	9,199,893	248,339.48	26.70
97 Colebrook,	492	2.69	718,352	1,412	719,764	19,335.61	39.22
98 Canton,	2,549	2.67	2,174,634	44,706	2,219,340	59,200.79	23.22
99 Bozrah,	858	2.65	606,055	5,889	611,944	16,200.00	18.88
100 East Windsor,	3,741	2.62	3,842,151	181,600	4,023,751	105,266.97	27.38
101 Kent,	1,086	2.62	1,145,891	8,591	1,154,482	30,200.00	27.88
102 Roxbury,	647	2.60	630,888	16,426	647,314	16,801.67	25.81
103 Lebanon,	1,343	2.57	1,423,472	58,597	1,482,069	38,279.07	28.48
104 Somers,	1,673	2.53	1,090,539	198,725	1,289,264	32,682.40	19.52
105 West Hartford,	8,854	2.49	19,269,385	10,866,326	30,135,711	749,567.81	84.66

a Percentage of net indebtedness, exclusive of water debt, to grand list, including stock 2.55.

b Percentage of net indebtedness, exclusive of water debt, to grand list, including stock 2.77.

c Percentage of net indebtedness, exclusive of water debt, to grand list, including stock 2.55.

COMPARISON OF MUNICIPAL INDEBTEDNESS

	Population 1920 census	Percentage of net in- debtedness to grand list, including stock	Grand list as returned by municipality	Assessed valuation of stock of banks, trust, insurance and invest- ment companies	Grand list including stock	Net indebtedness	Per capita indebtedness
TOWNS							
106 Canterbury,	896	2.47	\$407,963	\$6,255	\$414,218	\$10,233.00	\$11.42
107 Bloomfield,	2,394	2.40	3,613,376	287,907	3,851,283	92,639.49	38.65
108 Stamford,	40,067	2.39	55,743,108	976,659	56,719,767	1,856,520.43	33.86
109 Ellington,	2,127	2.35	1,357,928	221,033	1,578,961	37,088.03	17.44
110 New Hartford,	1,781	2.33	2,266,499	51,845	2,318,344	54,045.61	30.35
111 Cornwall,	834	2.28	856,805	71,141	927,946	21,149.14	25.36
112 Durham,	959	2.26	737,162	15,184	752,346	17,000.00	17.73
113 Plymouth,	5,942	2.25	4,550,689	184,949	4,735,638	106,683.24	17.95
114 East Lyme,	2,291	2.25	3,469,719	22,725	3,492,444	78,500.00	34.26
115 Burlington,	1,109	2.24	674,289	1,325	675,614	15,111.58	13.63
116 Monroe,	1,161	2.23	914,084	37,428	951,512	21,210.29	18.27
117 Chaplin,	385	2.19	243,879	16,836	260,765	5,722.66	14.86
118 New Milford,	4,781	2.16	5,682,555	814,982	5,997,537	129,500.00	27.09
119 Franklin,	552	2.15	463,861	7,664	471,525	10,129.75	18.85
120 Bethlehem,	536	2.13	725,059	19,029	744,088	15,831.92	29.54
121 Wethersfield,	4,342	2.09	3,588,372	1,170,162	4,758,534	99,377.04	22.89
122 Meriden,	34,764	2.05	25,818,998	1,180,321	26,999,319	552,248.03	15.89
123 Danbury,	22,325	2.04	22,943,424	411,554	23,354,978	475,500.00	21.30
124 Ashford,	673	2.00	384,799	151,706	536,505	10,726.06	15.94
125 Fairfield,	11,475	1.95	18,678,835	169,998	18,838,833	367,282.22	32.01
126 Granby,	1,342	1.94	1,071,388	145,575	1,216,963	23,651.42	17.62
127 Coventry,	1,582	1.93	973,208	25,258	998,466	19,246.77	12.17
128 Guilford,	2,803	1.90	2,902,468	44,490	2,946,958	55,850.00	19.93
129 Woodbridge,	1,170	1.89	1,931,735	57,009	1,988,744	37,493.86	32.05
130 Sterling,	1,266	1.88	1,010,898	1,884	1,012,732	19,000.00	15.01
131 Newtown,	2,751	1.88	2,298,199	149,614	2,447,813	46,000.00	16.72
132 Middlebury,	1,067	1.81	1,237,870	41,101	1,278,971	23,100.00	21.65
133 East Granby,	1,056	1.80	1,275,494	26,492	1,301,986	23,500.00	22.25
134 Andover,	389	1.76	296,706	156,466	453,172	7,983.23	20.52
135 North Haven,	1,968	1.74	3,013,167	271,734	3,284,901	57,020.05	28.97
136 Enfield,	11,719	1.72	12,939,752	716,299	13,656,051	234,817.89	20.04
137 Ledyard,	1,161	1.71	521,250	21,798	543,048	9,308.00	8.02
138 Windsor,	5,620	1.69	7,371,499	739,170	8,110,669	137,408.42	24.45
139 Hamden,	8,611	1.69	12,876,246	65,465	12,941,711	218,454.66	25.37
140 Brookfield,	896	1.67	668,911	25,731	694,642	11,600.00	12.95
141 Berlin,	4,298	1.65	3,805,869	423,962	4,229,831	70,000.00	16.29
142 Old Lyme,	946	1.63	1,388,233	25,526	1,413,759	23,050.00	24.37
143 Norfolk,	1,229	1.59	3,751,921	291,048	4,042,969	64,221.59	52.26
144 Union,	257	1.58	289,045	2,094	291,139	4,600.00	17.90
145 Seymour,	6,781	1.58	8,562,741	269,148	8,831,889	139,421.27	20.56
146 Farmington,	3,844	1.54	5,552,178	1,732,663	7,284,841	112,000.00	29.14
147 Plainville,	4,114	1.52	3,731,214	94,104	3,825,318	58,000.00	14.10
148 East Haven,	3,520	1.51	4,868,334	11,363	4,879,697	73,659.23	20.93
149 Vernon,	8,898	1.49	9,916,165	5,352,762	15,268,927	226,873.89	25.50
150 Westbrook,	849	1.47	1,340,474	27,623	1,368,097	20,175.00	23.76
151 Watertown,	6,050	1.46	6,196,588	193,251	6,389,839	93,152.50	15.40
152 Redding,	1,315	1.42	1,826,887	23,961	1,850,848	26,238.79	19.95
153 Washington,	1,619	1.40	3,409,076	24,128	3,433,204	47,963.00	29.63
154 New Fairfield,	468	1.36	613,484	12,159	625,643	8,500.00	18.16
155 Cheshire,	2,855	1.33	3,955,514	69,633	4,025,147	53,500.00	18.74
156 Warren,	350	1.32	430,792	781	431,573	5,700.00	16.29
157 Clinton,	1,217	1.31	1,655,128	128,965	1,784,093	23,356.86	19.19
158 Thomaston,	3,993	1.31	4,199,162	188,352	4,387,514	57,650.52	14.44
159 Canaan,	561	1.28	889,495	125,052	1,014,547	13,000.17	23.17
160 Montville,	3,411	1.27	4,219,515	38,186	4,257,701	54,100.00	15.86
161 Chester,	1,675	1.26	1,172,726	78,243	1,250,969	15,750.00	9.40
162 Scotland,	391	1.22	294,722	8,663	303,385	3,706.47	9.48
163 Woodstock,	1,767	1.19	1,260,222	38,285	1,298,507	15,458.85	8.75
164 Litchfield,	3,180	1.17	5,523,105	291,763	5,814,868	68,000.00	21.88
165 Killingworth,	531	1.15	356,910	.....	.....	4,093.17	7.71
166 Plainfield,	7,926	1.12	6,316,508	172,968	6,489,476	72,412.98	9.14
167 South Windsor,	2,142	1.10	3,960,330	838,557	4,798,887	52,559.21	24.54
168 Stafford,	5,407	1.07	5,657,247	705,745	6,362,992	68,319.95	12.64
169 Norwich,	29,685	1.04	19,233,255	961,430	20,194,685	209,405.95	7.05
170 East Haddam,	2,312	1.02	2,276,782	853,190	3,129,972	32,062.58	13.87
171 Ridgefield,	2,707	1.00	5,994,461	68,771	6,063,232	60,403.23	22.31

COMPARISON OF MUNICIPAL INDEBTEDNESS

	Population 1920 census	Percentage of net in- debtedness to grand list, including stock	Grand list as returned by municipality	Assessed valuation of stock of banks, trust, insurance and invest- ment companies	Grand list including stock	Net indebtedness	Per capita indebtedness
TOWNS							
172 Madison,	1,857	.99	\$4,847,033	\$37,247	\$4,384,280	\$43,516.13	\$23.43
173 Wilton,	1,284	.99	2,132,516	73,231	2,205,747	21,932.55	17.08
174 Cromwell,	2,454	.98	1,980,404	70,815	2,051,219	20,000.00	8.15
175 Bethany,	411	.95	796,431	14,607	811,038	7,701.33	18.74
176 Essex,	2,815	.87	3,106,750	260,336	3,367,086	29,460.83	10.47
177 Beacon Falls,	1,593	.84	1,281,080	19,350	1,300,410	10,871.33	6.82
178 Wolcott,	719	.82	606,400	1,206	607,606	5,000.00	6.95
179 Bolton,	448	.81	857,652	73,455	481,107	3,500.00	7.81
180 Branford,	6,627	.66	6,302,036	204,073	6,506,109	42,918.57	6.48
181 Hampton,	475	.59	475,292	7,918	483,210	2,828.28	5.95
182 Sharon,	1,585	.54	2,538,129	33,106	2,571,235	13,869.27	8.75
183 Pomfret,	1,454	.53	1,777,285	27,141	1,804,426	9,607.19	6.61
184 Prospect,	266	.48	341,350	3,361	344,711	1,647.00	6.19
185 Haddam,	1,736	.47	1,247,718	37,368	1,285,086	6,000.00	3.46
186 Manchester,	18,370	.47	25,640,908	2,152,469	27,793,377	130,000.00	7.08
187 Salisbury,	2,497	.42	3,452,263	268,817	3,721,080	15,500.00	6.21
188 Goshen,	675	.39	855,494	159,977	1,015,471	4,000.00	5.97
189 Easton,	1,017	.28	800,354	22,312	822,666	2,323.75	2.28
190 Middlefield,	1,047	.28	879,454	7,633	887,087	2,508.24	2.40
191 Thompson,	5,055	.19	2,824,422	133,519	2,957,941	5,573.25	1.10
192 Morris,	499	.18	864,161	4,153	1,264,314	2,217.00	4.44
193 Willington,	1,200	.10	3,258,991	136,033	3,395,024	3,351.67	2.79
TOWNS HAVING NO DEBT							
194 Avon,	1,534	....	\$1,644,561	\$155,638	\$1,800,199	.....	.....
195 Hartland,	448	....	298,880	3,350	302,230	.....	.....
196 Suffield,	4,070	....	6,199,591	4,233,900	10,433,491	.....	.....
197 Simsbury,	2,958	....	5,311,291	2,011,511	7,322,802	.....	.....

Estimated population, percentage of total net indebtedness, grand list, gross indebtedness, sinking fund, net indebtedness and per capita indebtedness of fire districts, arranged in order of percentage of total net indebtedness to grand list.

	Estimated Population	Percentage of total net indebtedness to grand list	Grand list	Gross indebtedness	Sinking fund	Net indebtedness	Per capita indebtedness
FIRE DISTRICTS							
198 Windsor,	3,700	9.99	\$1,825,772	\$182,500	.....	\$182,500	\$49.32
199 Watertown,	2,000	3.46	2,797,588	96,850	.....	96,850	48.43
200 Lakeville (Salisbury)	900	2.36	836,361	19,750	.....	19,750	21.94
201 Canaan (N. Canaan),	1,000	1.44	741,835	10,700	.....	10,700	10.70
202 Wolcott Hill (Wethersfield),	1,000	1.19	838,738	10,000	.....	10,000	10.00
203 Wethersfield,	2,500	1.13	1,855,306	22,000	\$1,036	20,964	8.39
204 Mystic (Groton & Stonington),	4,500	.76	2,227,025	17,000	.....	17,000	3.78
205 Westport,	2,000	.76	3,409,988	26,000	.....	26,000	13.00
206 Glastonbury,	350	.69	344,897	2,400	.....	2,400	6.86
207 E. Hartford Meadow (East Hartford),	1,800	.60	581,301	3,500	.....	3,500	1.91
208 Brooklyn,	750	.34	539,372	1,850	.....	1,850	2.47
209 Pawcatuck (Stonington),	4,000	.31	2,449,577	7,637	.....	7,637	1.91
210 Unionville (Farmington),	1,800	.24	1,902,588	4,500	.....	4,500	2.50
211 Warehouse Point, (East Windsor),	1,000	.20	708,870	1,400	.....	1,400	1.40

COMPARISON OF MUNICIPAL INDEBTEDNESS

	Estimated Population	Percentage of total net indebtedness to grand list	Grand list	Gross indebtedness	Sinking fund	Net indebtedness	Per capita indebtedness
212 No. Thompsonville (Enfield),	650	.19	\$258,190	\$500	.....	\$500	\$0.77
213 So. Glastonbury (Glastonbury),	1,500	.08	360,000	300	.....	300	.20
214 South (West Hartford),	2,500	.08	3,869,003	3,000	.....	3,000	1.20
215 New Milford Fire Association,	3,000	.07	1,654,000	1,200	.....	1,200	.40
216 Village (New Hartford),	1,000	.05	1,047,110	500	.....	500	.50
217 Enfield, No. 1	500	.02	1,000,000	200	.....	200	.40
218 Wilson (Windsor),	535	.....	.....^a	10,629	.....	10,629	19.87
219 Center (Glastonbury),	235	.....	.....^b	500	.....	500	2.13
FIRE DISTRICTS HAVING NO DEBT							
220 South Manchester (Manchester),	12,000	....	\$18,286,539	.....	.....	.....	....
221 Thompsonville Fire & Sewer (Enfield),	8,500	....	9,000,000	.....	.....	.....	....
222 Center (West Hartford),	3,600	....	3,801,442	.....	.....	.....	....
223 Oakville (Watertown),	2,500	....	1,504,139	.....	.....	.....	....
224 East Side (West Hartford),	1,700	....	6,410,371	.....	.....	.....	....
225 East Hampton,	1,600	....	1,768,672	.....	.....	.....	....
226 Allingtowa (Orange),	1,500	....	1,702,223	.....	.....	.....	....
227 Suffield,	1,500	....	.....^c	.....	.....	.....	....
228 West Shore (Orange),	1,200	....	1,684,680	.....	.....	.....	....
229 Tariffville (Simsbury),	850	....	362,449	.....	.....	.....	....
230 Hazardville (Enfield),	800	....	470,000	.....	.....	.....	....
231 Moodus (East Haddam),	800	....	566,539	.....	.....	.....	....
232 Higganum (Haddam),	700	....	439,396	.....	.....	.....	....
233 Sharon,	600	....	774,631	.....	.....	.....	....
234 Pine Meadow (New Hartford),	500	....	337,715	.....	.....	.....	....
235 Naubuc (Glastonbury),	350	....	271,222	.....	.....	.....	....
236 No. 4 (Thompson),	350	....	504,518	.....	.....	.....	....
237 Kent,	249	....	171,260	.....	.....	.....	....
238 Salmon Brook Light- ing Dist. (Granby),	267	....	211,758	.....	.....	.....	....
239 Falls Village (Canaan),	225	....	592,882	.....	.....	.....	....
240 Haddam Center (Haddam),	174	....	139,336	.....	.....	.....	....
241 East Haddam,	150	....	504,923	.....	.....	.....	....
242 Addison (Glastonbury), d	.....	.....	.....	.....	.....	.....	....
243 Hebron Ave. e (Glastonbury),	.....	.....	.....	.....	.....	.....	....
244 Still Hill e (Glastonbury),	.....	.....	.....	.....	.....	.....	....
245 Orenaug (Woodbury), f	.....	.....	.....	.....	.....	.....	....

^a First tax to be assessed on list of 1920. Grand list not yet completed.

^b Will not levy its first tax until autumn of 1921. Present grand list unknown.

^c Present grand list unknown. Last tax laid Jan. 14, 1918.

^d Organized 1919. Not yet carried on any operations.

^e Has not yet completed fiscal year.

^f Unable to obtain report from Fire District Treasurer.

COMPARISON OF MUNICIPAL EXPENSES AND TAX RATES

TABLE No. 5

Population 1920 census, valuation, assessed valuation per capita, tax rate per \$1,000, total current expenses, per capita current expenses, per capita tax, and percentage of total current expenses to valuation of cities, boroughs, fire districts, and towns, arranged in order of population.

CITIES	Population 1920 census	Grand list	Assessed valuation per capita	Tax rate per thousand	Total current expenses	Per capita current expenses	Per capita tax	Per capita tax including town tax	Percentage of total current expenses to
1 New Haven,	162,537	\$188,425,123	\$1,159.27	\$19.40a	\$5,050,633.17	\$31.07	\$22.49	b	
2 Bridgeport,	143,555	239,201,117	1,666.27	29.18	7,761,464.28	54.07	48.62	b	
3 Hartford,	138,036	170,813,891	1,237.45	28.98a	6,849,726.39	49.62	35.80	b	
4 Waterbury,	91,715	123,137,004	1,342.61	29.10a	5,070,697.12	55.29	39.07	b	
5 New Britain,	59,316	58,177,959	980.81	24.70a	1,753,250.44	29.56	24.23	b	
6 Stamford,	35,096	41,229,994	1,174.77	15.97	618,637.88	17.63	18.76	\$38.24	
7 Meriden,	29,867	23,034,292	771.23	10.50	313,645.03	10.50	8.10	22.21	
8 Norwalk,	27,743	28,444,145	1,025.27	20.70a	795,570.03	28.68	21.22	b	
9 New London,	25,688	32,090,628	1,249.25	26.88	1,241,499.26	48.33	33.57	b	
10 Norwich,	22,304	27,383,619	1,227.75	18.74	825,372.86	37.01	23.01	35.16	
11 Bristol,	20,620	23,741,334	1,151.37	24.48a	569,166.51	27.60	23.19	b	
12 Danbury,	18,943	20,750,000	1,095.39	12.75	291,748.51	15.40	13.97	29.26	
13 Ansonia,	17,643	19,627,735	1,112.49	20.50	431,480.40	24.46	22.81	b	
14 Middletown,	13,638	12,666,613	899.44	15.00	182,659.87	13.39	13.49	26.75	
15 Willimantic,	12,330	14,064,711	1,140.69	8.50	135,271.50	10.97	9.70	21.03	
16 Derby,	11,238	9,633,590	857.23	21.50a	201,813.81	17.96	18.43	b	
17 Shelton,	9,475	10,083,770	1,064.25	20.69a	202,286.47	21.35	22.02	b	
18 Rockville,	7,726	6,730,527	871.15	10.00	87,096.93	11.27	8.71	22.08	
19 Putnam,	7,711	4,626,231	599.95	11.50	117,324.91	15.22	6.90	20.12	
BOROUGHES									
20 Torrington,	20,623	\$24,457,779	\$1,137.45	\$8.51	\$281,200.37	\$11.21	\$9.68	\$33.30	
21 Naugatuck,	15,051	12,396,835	823.65	28.91a	289,420.29	19.23	23.81	c	
22 Wallingford,	9,648	12,479,987	1,293.53	5.00	67,235.58	6.97	6.47	21.93	
23 East Hartford, d	8,000e	6,700,000	837.50	6.50	219,850.70	27.48	5.44	22.90	
24 Greenwich,	5,939	8,248,017	1,388.79	7.00	124,740.93	21.00	9.72	47.52	
25 Southington,	5,085	4,102,329	806.75	5.00	26,006.17	5.11	4.04	23.02	
26 Groton,	4,236	5,000,000	1,180.36	5.00	16,558.27	3.91	5.90	21.16	
27 Stafford Springs,	3,383	3,833,940	1,133.29	4.00	17,674.86	5.22	4.53	19.18	
28 Jewett City,	3,196	1,884,029	589.49	5.00	21,087.05	6.60	2.95	18.20	
29 Danielson,	3,130	2,522,862	806.02	6.50	27,824.90	8.89	5.24	19.76	
30 Branford,	2,619	1,763,703	673.43	3.00	4,780.75	1.83	2.02	20.80	
31 Stonington,	2,100	754,985	359.51	10.00	10,505.69	5.00	3.60	17.16	
32 New Canaan,	1,918	1,990,900	1,038.00	10.00	33,968.20	17.71	10.38	43.31	
33 Guilford,	1,612	1,382,758	857.79	5.00	6,482.39	4.02	4.28	19.81	
34 Ridgefield,	1,030	2,160,183	2,097.26	5.00	36,634.08	35.57	10.43	35.95	
35 Farmington,	1,021	2,316,582	2,268.93	4.50	11,141.07	10.91	10.21	25.06	
36 Colchester,	913	388,366	425.37	4.00	1,644.74	1.80	1.70	12.62	
37 Litchfield,	707	2,516,244	3,559.04	3.50	6,894.85	9.75	12.46	40.31	
38 Bantam,	608	512,840	843.49	2.50	918.77	1.51	2.11	29.50	
39 Newtown,	426	565,575	1,327.64	4.00	2,091.12	4.91	5.31	26.00	
40 Woodmont,	220	1,291,594	5,870.88	2.50	10,317.85	46.90	14.68	41.00	
41 Fenwick, f	150	176,010	1,173.40	40.00f	5,574.17	37.16	46.94	62.00	

a Average.

b City and town governments consolidated.

c Borough and town governments consolidated.

d Fire district of East Hartford has all powers of a borough.

e Estimate of fire district clerk.

f A summer colony, only 13 winter inhabitants.

COMPARISON OF MUNICIPAL EXPENSES AND TAX RATES

	Estimated population	Grand list	Assessed valuation per capita	Tax rate per thousand	Total current expenses	Per capita current expenses	Per capita tax	Percentage of total current expenses to grand list
FIRE DISTRICTS								
42 South Manchester,	12,000	\$18,286,539	\$1,523.88	\$2.50	\$18,405.97	\$1.53	\$3.81	0.10
43 Thompsonville Fire and Sewer,	8,500	9,000,000	1,058.82	.50	12,406.29	1.46	.53	.14
44 Mystic,	4,500	2,227,025	494.89	5.00	10,054.78	2.23	2.47	.45
45 Pawcatuck (Stonington),	4,000	2,449,577	612.39	3.00	7,376.88	1.84	1.84	.30
46 Windsor,	3,700	1,825,772	493.45	3.00	20,517.56	5.55	1.48	1.12
47 Center (W. Hartford),	3,600	3,801,442	1,055.86	2.00	7,732.01	2.15	2.11	.20
48 New Milford Fire Asso.,	3,000	1,654,000	551.33	3.50	6,926.75	2.31	1.93	.42
49 Oakville (Watertown),	2,500	1,504,139	601.66	1.25	1,041.70	.42	.75	.07
50 South (W. Hartford),	2,500	3,869,003	1,547.60	2.00	3,464.23	1.39	3.10	.09
51 Wethersfield,	2,500	1,855,306	742.12	2.00	7,663.94	3.07	1.48	.41
52 Watertown,	2,000	2,797,588	1,398.79	1.75	10,859.02	5.43	2.45	.39
53 Westport,	2,000	3,409,988	1,704.99	2.00	4,996.15	2.50	3.41	.15
54 East Hartford Meadow,	1,800	581,301	322.95	6.00	9,464.60	5.26	1.94	1.63
55 Unionville,	1,800	1,902,588	1,056.99	2.50	5,142.83	2.86	2.64	.27
56 East Side (W. Htfd.),	1,700	6,410,871	3,771.10	2.00	21,785.02	12.81	7.54	.34
57 East Hampton,	1,600	1,768,672	1,105.42	2.00	2,430.09	1.52	2.21	.14
58 Allington (Orange),	1,500	1,702,223	1,134.82	1.00	1,930.42	1.29	1.13	.11
59 South Glastonbury,	1,500	360,000	240.00	10.00	332.00	.22	2.40	.09
60 Suffield,	1,500	a	a	a	2,398.10	1.60	a	a
61 West Shore (Orange),	1,200	1,684,680	1,403.90	2.00	4,416.61	3.68	2.81	.26
62 Canaan (No. Canaan),	1,000	741,335	741.34	3.00	2,700.84	2.70	2.22	.36
63 Village (New Hartford),	1,000	1,047,110	1,047.11	2.00	2,223.23	2.22	2.09	.21
64 Warehouse Point (East Windsor),	1,000	708,870	708.87	2.00	1,805.70	1.81	1.42	.25
65 Wolcott Hill (Wethers- field),	1,000	838,738	838.74	4.00	5,162.51	5.16	3.35	.62
66 Lakeville (Salisbury),	900	836,361	929.29	4.00	4,250.90	4.72	3.72	.51
67 Tariffville (Simsbury),	850	362,449	426.41	2.00	611.23	.72	.85	.17
68 Hazardville (Enfield),	800	470,000	587.50	3.00	159.06	.20	1.76	.08
69 Moodus (East Haddam),	800	566,539	708.17	3.00	853.15	1.07	2.12	.15
70 Brooklyn,	750	539,372	719.16	2.50	1,215.26	1.62	1.80	.23
71 Higganum (Haddam),	700	439,396	627.71	3.00	1,134.16	1.62	1.88	.26
72 North Thompsonville (Enfield),	650	258,190	397.22	1.00	66.40	.10	.40	.03
73 Sharon,	600	774,631	1,291.05	2.50	1,550.43	2.58	3.23	.20
74 Wilson (Windsor),	535	b	b	b	3,663.62	6.85	b	b
75 Enfield No. 1,	500	1,000,000	2,000.00	c	81.58	.16	c	.01
76 Pine Meadow (New Hartford),	500	337,715	675.43	2.50	914.97	1.83	1.69	.27
77 Glastonbury,	350	344,897	985.42	3.00	2,504.72	7.16	2.96	.73
78 Naubuc (Glastonbury),	350	271,222	774.92	3.00	850.19	2.43	2.32	.31
79 Number 4 (Thompson),	350	504,518	1,441.48	h	5.25	.02	h	.001
80 Kent,	289	171,260	636.65	3.00	617.68	2.30	1.91	.36
81 Salmon Brook Lighting (Granby),	287	211,758	793.10	2.50	875.38	3.28	1.98	.41
82 Center (Glastonbury),	235	d	d	d	393.92	1.68	d	d
83 Falls Village (Canaan),	225	592,882	2,635.03	1.50	808.43	3.59	3.95	.14
84 Haddam Ctr. (Haddam),	174	139,336	800.78	3.00	311.16	1.79	2.40	.22
85 East Haddam,	150	504,923	3,366.15	2.00	480.98	3.21	6.73	.10
86 Addison (Glastonbury),	e	e	e	e	e	e	e	e
87 Hebron Ave. (Glaston- bury),	f	f	f	f	f	f	f	f
88 Still Hill (Glastonbury),	f	f	f	f	f	f	f	f
89 Orenaug (Woodbury),	g	g	g	g	g	g	g	g

a Present Grand List unknown. Last tax laid Jan 14, 1918.

b First tax to be assessed on list of 1920. Grand list not yet completed.

c No tax laid for five years.

d Will not levy its first tax until autumn of 1921. Present Grand List unknown.

e Organized 1919. Not yet carried on any operations.

f Has not yet completed fiscal year.

g Unable to obtain report from Fire District Treasurer.

h Fire District laid no tax during the year 1920.

COMPARISON OF MUNICIPAL EXPENSES AND TAX RATES

TOWNS	Population 1920 census	Grand list	Assessed valuation per capita	Tax rate per thousand	Total current expenses	Per capita current expenses	Per capita tax	Percentage of total current expenses to grand list
90 Stamford,	40,067	\$55,743,108	\$1,391.25	\$14.00	\$948,219.34	\$22.67	\$19.48	1.76
91 Meriden,	34,764	25,818,998	742.69	19.00	580,035.29	16.68	14.11	2.25
92 Norwich,	29,685	19,233,255	647.91	18.75	402,286.86	13.55	12.16	2.94
93 Danbury,	22,325	22,943,424	1,027.70	14.88	401,533.50	17.99	15.29	1.75
94 Middletown,	22,129	17,808,371	804.68	16.48a	281,879.49	12.74	13.26	1.68
95 Greenwich,	22,123	61,782,707	2,340.67	16.15a	977,478.57	44.18	37.80	1.59
96 Torrington,	22,056	26,041,982	1,180.77	20.00	583,205.30	26.44	23.62	2.24
97 Manchester,	18,370	25,640,308	1,395.80	15.82a	399,557.34	21.75	22.08	1.56
98 Orange,	16,614	20,436,609	1,230.08	13.18a	382,846.19	23.04	16.21	1.87
99 Windham,	13,801	15,622,381	1,132.01	10.01a	204,749.49	14.84	11.33	1.31
100 Stratford,	12,347	15,168,956	1,228.55	20.00	563,712.62	45.66	24.57	3.72
101 Wallingford,	12,010	15,314,887	1,275.18	12.12a	229,917.80	19.14	15.46	1.59
102 Enfield,	11,719	12,939,752	1,104.17	15.00	215,443.81	18.38	16.56	1.66
103 East Hartford,	11,648	11,556,275	992.13	17.60a	257,013.79	22.07	17.46	2.22
104 Fairfield,	11,475	18,678,835	1,627.78	12.00	231,879.97	20.19	19.53	1.24
105 Stonington,	10,236	7,307,401	713.89	19.00	166,264.56	16.24	13.56	2.28
106 Milford,	10,193	13,373,483	1,312.02	20.61a	318,449.59	31.24	27.04	1.86
107 Groton,	9,227	8,925,063	967.27	15.78a	166,342.98	18.03	15.26	2.22
108 Winchester,	9,019	8,716,641	966.47	15.40	196,417.20	21.78	14.88	2.22
109 Vernon,	8,898	9,916,165	1,114.42	12.00	172,267.41	19.36	13.37	1.34
110 West Hartford,	8,854	19,269,385	2,176.35	15.00	384,406.19	43.42	32.65	1.92
111 Hamden,	8,611	12,876,246	1,495.33	20.00	349,264.60	40.56	29.91	2.27
112 Southington,	8,440	7,199,757	853.05	22.25	213,630.67	25.31	18.98	2.97
113 Putnam,	8,397	5,549,416	660.88	20.00	124,377.38	14.81	13.22	1.24
114 Killingly,	8,178	5,938,129	726.11	20.00	139,149.62	17.02	14.52	2.34
115 Plainfield,	7,926	6,316,508	796.93	15.00	88,926.90	11.22	11.95	1.41
116 Seymour,	6,781	8,562,741	1,262.75	13.00	154,716.45	22.82	16.42	1.81
117 Branford,	6,627	6,302,036	950.96	19.75	124,614.26	18.80	18.78	1.98
118 Watertown,	6,050	6,196,588	1,024.23	22.00	179,738.61	29.71	22.53	2.26
119 Plymouth,	5,942	4,550,689	765.85	22.50	117,647.06	19.80	17.23	2.59
120 Windsor,	5,620	7,371,499	1,311.65	25.00	142,531.04	25.36	32.79	1.96
121 Glastonbury,	5,592	4,183,396	748.10	27.00	162,503.55	29.06	20.20	3.88
122 Stafford,	5,407	5,657,247	1,046.28	14.00	96,230.05	17.80	14.65	1.77
123 Westport,	5,114	9,840,074	1,924.14	13.50	164,977.28	32.26	25.93	1.68
124 Thompson,	5,056	2,824,422	558.73	17.00	82,241.28	16.27	9.50	2.91
125 New Milford,	4,781	5,682,555	1,188.57	14.00a	92,985.96	19.45	16.64	1.64
126 Wethersfield,	4,342	3,588,372	826.43	18.00a	86,951.41	20.03	14.88	2.42
127 Berlin,	4,298	3,805,869	885.49	20.00	87,536.11	20.37	17.71	2.30
128 Griswold,	4,220	2,704,545	640.88	23.79a	60,820.85	14.41	15.25	1.29
129 Darien,	4,184	7,451,572	1,780.97	17.75	159,397.83	38.10	31.61	2.04
130 Plainville,	4,114	3,731,214	906.96	17.50	72,088.48	17.52	15.87	1.77
131 Suffield,	3,993	4,199,162	1,523.24	14.00	147,310.42	36.19	21.33	2.68
132 Thomaston,	3,935	2,712,361	1,051.63	18.00	79,426.60	19.89	18.93	1.87
133 Waterford,	3,895	7,371,761	1,892.62	17.40	72,802.54	18.50	15.16	2.83
134 New Canaan,	3,844	5,552,178	1,444.38	10.28a	113,583.46	29.16	32.93	1.54
135 Farmington,	3,741	3,542,151	1,027.04	22.00	78,065.90	20.31	14.85	1.92
136 East Windsor,	3,644	3,322,122	911.64	25.00	86,789.26	23.20	22.59	2.25
137 Portland,	3,554	4,873,000	1,371.13	15.00	72,783.24	19.97	22.79	2.20
138 Windsor Locks,	3,520	4,863,334	1,381.62	13.00	118,607.11	33.37	20.57	2.40
139 East Haven,	3,411	4,219,515	1,237.03	16.00	62,643.29	17.80	17.96	1.24
140 Montville,	3,201	2,293,180	716.39	23.90	58,328.91	17.10	19.79	1.58
141 Bethel,	3,180	5,523,105	1,736.82	16.00	82,030.78	25.63	17.12	3.58
142 Litchfield,	2,958	5,311,291	1,795.57	10.00	107,112.06	33.68	27.79	1.94
143 Simsbury,	2,855	3,955,514	1,385.47	17.00	95,933.43	32.43	17.96	1.81
144 Cheshire,	2,815	3,106,750	1,103.64	12.00	56,933.53	19.94	23.55	1.44
145 Essex,	2,803	2,902,468	1,035.49	15.00	40,570.46	14.41	13.24	1.31
146 Guilford,	2,751	2,298,199	835.40	25.00	41,619.03	14.85	15.53	1.43
147 Newtown,					62,081.86	22.57	20.89	2.70

a Average.

COMPARISON OF MUNICIPAL EXPENSES AND TAX RATES

TOWNS	Population 1920 census	Grand list	Assessed valuation per capita	Tax rate per thousand	Total current expenses	Per capita current expenses	Per capita tax	Percentage of total current expenses to grand list
148 Preston,	2,743	\$1,055,419	\$384.77	\$15.00	\$19,574.00	\$7.14	\$5.77	1.85
149 Ridgefield,	2,707	5,994,461	2,214.43	11.50	79,323.44	29.30	25.47	1.32
150 Trumbull,	2,597	2,677,212	1,030.88	16.00	101,350.36	39.03	16.49	3.79
151 Mansfield,	2,574	1,506,962	585.46	20.00	46,841.06	18.20	11.71	3.11
152 Canton,	2,549	2,174,634	853.13	20.00	54,586.95	21.42	17.06	2.51
153 Sprague,	2,500	2,764,507	1,105.80	14.00	45,437.97	18.18	15.48	1.64
154 Salisbury,	2,497	3,452,263	1,382.56	13.27a	62,896.11	25.19	18.35	1.82
155 Cromwell,	2,454	1,980,404	807.01	17.00	46,728.26	19.04	13.72	2.36
156 Bloomfield,	2,394	3,613,376	1,509.35	17.50	65,574.14	27.39	26.41	1.81
157 East Hampton,	2,394	2,661,096	1,111.56	20.00	63,755.86	26.63	22.23	2.40
158 Newington,	2,381	2,648,376	1,112.29	18.00	46,243.05	19.12	20.02	1.75
159 Saybrook,	2,325	1,764,815	759.06	18.00	54,684.95	23.52	13.66	3.10
160 East Haddam,	2,312	2,276,782	984.77	12.00	46,439.80	20.09	11.82	2.04
161 East Lyme,	2,291	3,469,719	1,614.49	9.00	47,705.24	20.82	13.63	1.87
162 South Windsor,	2,142	8,960,330	1,848.89	25.00	95,452.45	44.56	46.22	2.41
163 Ellington,	2,127	1,357,928	638.42	29.00	43,792.34	20.59	18.51	3.22
164 Colchester,	2,050	944,997	460.97	23.69a	42,013.74	20.49	10.92	4.45
165 Harwinton,	2,020	1,266,704	627.08	20.00	38,410.62	19.02	12.54	3.03
166 North Haven,	1,968	3,013,167	1,531.08	17.00	56,635.75	28.78	26.03	1.88
167 North Canaan,	1,933	1,533,388	793.26	17.00a	48,907.70	25.30	13.49	3.19
168 Madison,	1,857	4,347,033	2,340.89	9.00	38,245.51	20.60	21.07	.88
169 New Hartford,	1,781	2,266,499	1,272.59	13.90a	35,853.01	20.13	17.69	1.58
170 Woodstock,	1,767	1,260,222	713.19	18.50	39,031.39	22.09	13.19	3.10
171 Haddam,	1,736	1,247,718	718.72	19.26a	35,220.02	20.29	13.84	2.82
172 Woodbury,	1,698	1,512,217	890.58	16.50	38,540.05	22.70	14.69	2.55
173 Chester,	1,675	1,172,726	700.13	25.00	32,900.24	19.64	17.50	2.81
174 Somers,	1,673	1,090,539	651.85	20.00	37,050.09	22.15	13.04	3.40
175 Brooklyn,	1,655	1,499,100	905.80	16.00	31,338.52	18.94	14.49	2.09
176 Rocky Hill,	1,633	1,836,779	818.60	20.00	30,145.09	18.46	16.37	2.26
177 Washington,	1,619	3,409,076	2,105.66	11.00	50,260.08	31.04	23.16	1.47
178 Beacon Falls,	1,593	1,281,060	804.18	16.00	24,050.30	15.10	12.87	1.88
179 Sharon,	1,585	2,538,129	1,601.34	14.50	42,796.55	27.00	23.22	1.69
180 Coventry,	1,582	973,208	615.17	24.00	31,161.16	19.70	14.76	3.20
181 Avon,	1,534	1,644,561	1,072.07	20.00	30,255.78	19.72	21.44	1.84
182 Old Saybrook,	1,463	1,508,401	1,031.03	15.50	29,320.57	20.04	15.98	1.94
183 Pomfret,	1,454	1,777,285	1,222.34	18.00	40,218.85	27.66	22.00	2.26
184 Lebanon,	1,343	1,433,472	1,067.36	16.00	31,950.37	23.79	17.08	2.23
185 Granby,	1,342	1,071,388	798.35	21.00	33,493.29	24.96	16.77	3.13
186 Redding,	1,315	1,826,887	1,389.27	15.50	30,637.07	23.30	21.53	1.68
187 Wilton,	1,284	2,132,516	1,660.83	18.50	37,161.33	28.94	22.42	1.74
188 Sterling,	1,266	1,010,898	798.50	19.00	21,081.54	16.65	15.17	2.09
189 Norfolk,	1,229	3,751,921	3,052.82	16.36a	67,146.07	54.63	49.94	1.79
190 Clinton,	1,217	1,655,128	1,360.00	14.00	19,037.26	15.64	19.04	1.15
191 Willington,	1,200	3,258,991	2,715.83	4.00	25,576.35	21.31	10.86	.78
192 Woodbridge,	1,170	1,931,735	1,651.06	14.00	47,758.35	40.82	23.11	2.47
193 Ledyard,	1,161	521,250	448.97	20.00	15,079.71	12.99	8.98	2.89
194 Monroe,	1,161	914,084	787.32	12.00	17,732.25	15.27	9.45	1.94
195 North Stonington,	1,144	659,653	576.62	20.00	14,696.01	12.85	11.53	2.23
196 North Branford,	1,110	1,002,975	903.58	20.00	23,562.02	30.24	18.07	3.85
197 Burlington,	1,109	674,289	608.01	25.00	23,817.40	21.48	15.20	3.63
198 Southbury,	1,093	912,104	834.50	20.00	28,322.16	25.91	16.69	3.11
199 Kent,	1,086	1,145,891	1,055.15	20.00	29,508.12	27.17	21.10	2.58
200 Middlebury,	1,067	1,237,870	1,160.14	13.50	18,479.65	17.32	15.66	1.49
201 East Granby,	1,056	1,275,494	1,207.85	18.00	30,912.29	29.27	21.74	2.42
202 Middlefield,	1,047	879,454	839.98	15.00	14,483.35	13.83	12.60	1.65
203 Tolland,	1,040	753,014	724.05	20.00	23,076.57	22.19	14.48	3.06
204 Easton,	1,017	800,354	786.98	18.00	19,987.55	19.65	14.17	2.50
205 Oxford,	.998	1,002,175	1,004.18	20.00	22,878.82	22.92	20.08	2.28

a Average.

COMPARISON OF MUNICIPAL EXPENSES AND TAX RATES

	Population 1920 census	Grand list	Assessed valuation per capita	Tax rate per thousand	Total current expenses	Per capita current expenses	Per capita tax	Percentage of total current expenses to grand list
TOWNS								
206 Durham,	959	\$737,162	\$768.68	\$22.00	\$21,113.36	\$22.02	\$16.91	2.86
207 Old Lyme,	946	1,388,233	1,467.48	15.00	26,164.71	27.66	22.01	1.85
208 Hebron,	916	578,297	632.02	22.00	18,155.36	19.84	13.90	3.14
209 Brookfield,	896	668,911	746.55	18.00	25,950.37	28.96	13.44	3.88
210 Canterbury,	896	407,963	455.31	27.00	11,780.31	13.15	12.29	2.81
211 Lisbon,	867	460,943	520.12	25.00	16,198.13	18.68	13.00	3.59
212 Bozrah,	858	606,055	706.36	15.00	17,129.78	19.96	10.60	2.82
213 Westbrook,	849	1,340,474	1,578.88	14.00	23,486.55	27.66	22.10	1.55
214 Cornwall,	834	856,805	1,027.34	18.00	19,175.45	22.99	18.49	2.24
215 Barkhamsted,	719	437,970	609.14	25.00	16,928.66	23.54	15.23	3.87
216 Wolcott,	719	606,400	843.39	19.00	14,423.68	20.06	16.02	2.53
217 Columbia,	706	488,633	692.11	20.00	14,381.30	20.37	13.84	2.94
218 Weston,	703	511,311	727.33	15.00	12,448.99	17.71	10.91	2.45
219 Goshen,	675	855,494	1,267.40	17.00	18,297.48	27.11	21.55	2.14
220 Lyme,	674	664,872	986.46	21.00	18,375.15	19.84	20.72	2.07
221 Ashford,	673	384,799	571.76	23.00	15,179.19	22.55	13.15	3.94
222 Voluntown,	656	269,176	410.33	40.00	12,759.87	19.45	16.41	4.74
223 Roxbury,	647	630,888	975.09	18.00	12,258.61	18.95	17.55	1.94
224 Canaan,	561	889,495	1,585.55	15.00	17,042.46	30.38	23.78	1.92
225 Franklin,	552	463,861	840.33	20.00	12,251.50	22.19	16.81	2.61
226 Bethlehem,	536	725,059	1,352.72	12.00	11,943.53	22.28	16.23	1.65
227 Sherman,	533	411,462	771.97	18.00	12,408.10	23.28	13.90	3.91
228 Killingworth,	531	356,910	672.14	20.00	12,158.51	22.90	13.44	3.41
229 Morris,	499	864,161	1,731.78	13.00	16,162.97	32.39	22.51	1.87
230 Eastford,	496	267,665	539.65	30.00	11,472.26	23.13	16.19	4.22
231 Colebrook,	492	718,352	1,460.06	20.00	19,545.95	39.73	29.20	2.72
232 Bridgewater	481	491,766	1,022.38	16.00	10,263.90	21.34	16.36	2.99
233 Hampton,	475	475,292	1,000.61	21.00	11,116.85	23.40	21.01	2.34
234 New Fairfield,	468	613,484	1,310.86	20.00	13,435.24	28.71	26.22	2.13
235 Bolton,	448	357,652	798.33	20.00	9,623.09	21.48	15.97	2.66
236 Hartland,	448	298,880	667.14	25.00	11,410.26	25.47	16.68	3.82
237 Salem,	424	360,751	850.32	20.00	8,870.85	20.92	17.02	2.41
238 Bethany,	411	796,431	1,937.78	12.00	12,795.08	31.13	23.25	1.67
239 Scotland,	391	294,722	753.76	23.00	8,628.59	22.07	17.34	2.61
240 Andover,	389	296,706	762.74	15.00	6,413.90	16.49	11.44	2.16
241 Chaplin,	385	243,879	633.45	20.00	6,584.10	17.10	12.67	2.75
242 Warren,	350	430,792	1,230.83	15.00	9,279.06	26.51	18.46	2.15
243 Marlborough,	303	182,717	603.08	25.00	6,077.77	20.06	15.08	3.33
244 Prospect,	266	341,350	1,283.27	\$2.51a	12,312.42	46.29	41.72	3.61
245 Union,	257	289,045	1,124.69	30.00	9,564.74	37.22	33.74	3.31

a Average.

TABLE No. 6

Table showing the total indebtedness of consolidated towns and those having cities, boroughs, fire districts, and school districts within their borders, in order of population according to 1920 census.

TOWNS	Population	Net indebtedness	Percentage of net indebtedness to grand list	Per capita indebtedness
1 New Haven, a	162,537	\$6,590,922.91	3.50	\$40.55
2 Bridgeport, a	143,555	10,341,416.05	4.57	76.22
3 Hartford, a	138,036	13,357,243.00	7.82	96.77
4 Waterbury, a	91,715	7,857,840.00	6.98	85.68
5 New Britain, a	59,316	3,293,333.44	5.66	55.52
6 Stamford	40,067	2,134,326.15	3.83	53.27
7 Meriden	34,764	1,022,248.03	3.96	29.41
8 Norwich	29,685	1,955,240.77	10.17	65.87
9 Norwalk, a	27,743	3,109,411.03	10.93	112.07
10 New London, a	25,688	2,140,433.54	6.67	83.32
11 Danbury	22,325	1,376,647.12	6.00	61.66
12 Middletown	22,129	1,047,396.25	5.88	47.33
13 Greenwich	22,123	1,979,200.00	3.82	89.46
14 Torrington	22,055	1,201,780.25	4.61	54.49
15 Bristol, a	20,620	1,246,148.67	5.25	60.43
16 Manchester	18,370	476,025.00	1.86	25.91
17 Ansonia, a	17,643	275,064.11	1.40	15.59
18 Orange	16,614	1,042,470.76	5.10	62.75
19 Naugatuck, b	15,051	200,033.71	1.61	13.29
20 Windham	13,801	765,999.31	4.90	55.50
21 Wallingford	12,010	983,780.07	6.42	81.91
22 Enfield	11,719	235,517.89	1.82	20.10
23 East Hartford	11,648	1,070,392.27	9.26	91.89
24 Derby, a	11,238	248,470.83	2.58	22.11
25 Groton	10,236	366,422.41	5.01	35.80
26 Milford	10,193	551,200.00	4.12	54.08
27 Shelton, a	9,475	496,355.32	4.92	52.39
28 Groton	9,227	664,539.48	7.45	72.02
29 Vernon	8,898	373,647.75	3.77	41.99
30 West Hartford	8,854	752,567.81	3.91	85.00
31 Southington	8,440	402,983.91	5.60	47.75
32 Putnam	8,397	671,000.34	12.09	79.91
33 Killingly	8,178	320,397.05	5.40	39.18
34 Branford	6,627	42,918.57	.68	6.48
35 Watertown	6,050	190,002.50	3.07	31.41
36 Windsor	5,620	330,537.65	4.48	58.81
37 Glastonbury	5,592	146,651.93	3.51	26.22
38 Stafford	5,407	83,319.85	1.47	15.41
39 Westport	5,114	373,592.61	3.80	73.05
40 Thompson	5,055	5,573.25	.20	1.10
41 New Milford	4,781	130,700.00	2.30	27.34
42 Wethersfield	4,342	165,341.39	4.61	38.08
43 Griswold	4,220	205,764.34	7.61	48.76
44 New Canaan	3,895	313,019.04	4.25	80.36
45 Farmington	3,844	119,386.76	2.15	31.06
46 East Windsor	3,741	106,666.97	2.78	28.61
47 Bethel	3,201	120,989.98	5.28	37.80
48 Litchfield	3,180	92,500.00	1.67	29.09
49 Guilford	2,803	59,450.00	2.05	21.21
50 Newtown	2,751	46,000.00	2.00	16.72
51 Ridgefield	2,707	107,414.15	1.79	39.68
52 Salisbury	2,497	37,150.00	1.08	14.88
53 East Hampton	2,394	80,235.84	3.02	33.51
54 East Haddam	2,312	32,062.58	1.41	13.87
55 Colchester	2,050	28,797.50	3.05	14.05
56 North Canaan	1,933	70,264.60	4.58	36.35
57 New Hartford	1,781	54,545.61	2.41	30.63
58 Haddam	1,736	6,000.00	.48	3.46
59 Brooklyn	1,655	52,435.55	3.50	31.68
60 Sharon	1,585	13,869.27	.55	8.75
61 Old Saybrook	1,462	52,388.86	3.47	35.83
62 Granby	1,342	28,651.42	2.21	17.62
63 Kent	1,086	30,200.00	2.64	27.81
64 Canaan	561	13,000.17	1.46	23.17
65 Prospect	266	2,847.00	.83	10.70

a Town and city governments consolidated.

b Town and borough governments consolidated.

TABLE No. 7.

Charts showing relative increase in grand list, indebtedness, amount raised by taxation, expenditures for roads, schools, and interest, compared with increase in population from 1880 to 1920.

				1920 34,512,504
		1920 1,647,776,228		
		1915 1,743,531,713	1920 79,385,900	
				1916 21,941,352
			1916 60,390,633	
		1911 948,399,019		1912 14,735,814
			1912 43,540,230	1908 11,145,639
		1907 738,227,086		
1920 1,380,631			1908 38,463,705	1904 8,925,314
1916 1,330,942				1900 8,006,904
		1903 612,111,711	1904 32,520,460	
1912 1,128,452				
1908 1,079,867		1899 508,143,749	1900 27,624,827	
				1896 6,639,717
1900 908,420		1895 444,321,927	1896 24,581,066	1892 5,886,618
		1891 372,874,447		
1890 746,258		1887 352,795,926	1892 20,627,058	1888 5,270,147
		1883 348,774,579	1888 19,392,804	
1880 622,700		1879 327,162,435	1884 17,636,289	1880 4,914,745
			1880 17,355,999	1884 4,254,552
POPULATION	GRAND LIST OF STATE AS RETURNED BY TOWNS		INDEBTEDNESS	TAXATION RECEIPTS

CHART SHOWING RELATIVE INCREASE SINCE 1880 OF POPULATION, GRAND LIST, INDEBTEDNESS, AND RECEIPTS FROM TAXATION OF ALL MUNICIPALITIES.

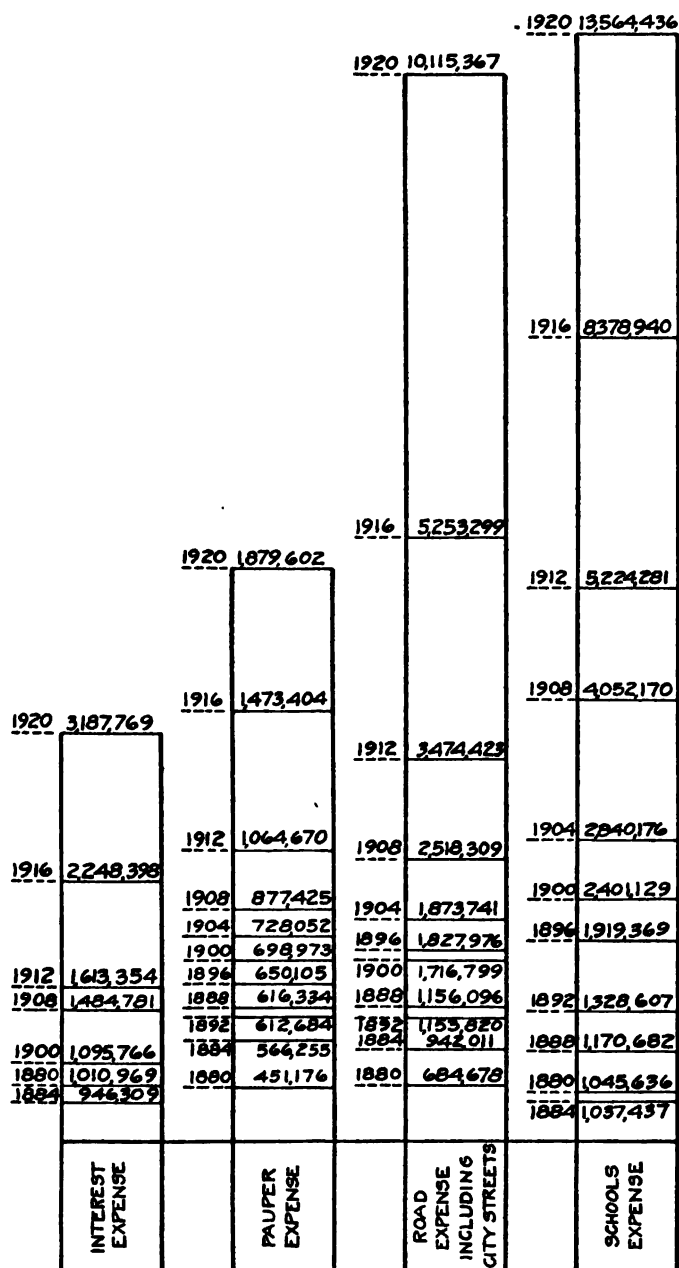


CHART SHOWING RELATIVE INCREASE SINCE 1880 OF EXPENDITURES FOR INTEREST, PAUPERS, ROADS AND SCHOOLS BY ALL MUNICIPALITIES.

Table No. 8
COMPARATIVE ABSTRACT OF FOREGOING STATISTICS SINCE 1888

	1888	1892	1896	1900	1904	1908	1912	1916	1920
Funded indebtedness	\$15,569,818	\$16,023,332	\$19,749,667	\$22,142,993	\$26,906,859	\$30,591,153	\$37,058,361	\$51,283,300	\$89,511,940
Floating indebtedness	3,759,642	4,473,571	4,394,980	5,005,323	5,269,101	7,865,551	6,481,868	9,122,338	9,873,980
Total indebtedness	19,329,460	20,496,903	24,144,647	27,148,316	32,175,960	38,456,704	43,540,229	60,405,638	99,385,920
Raised by taxation during year	5,270,147	5,886,618	6,639,717	8,006,904	8,925,314	11,145,639	14,755,814	21,941,352	34,312,504
Expended for int. on indebtedness dur'g yr.	1,017,799	941,848	993,041	1,095,766	1,178,348	1,484,781	1,613,854	2,248,398	3,187,769
Expended for roads during year	1,156,096	1,153,820	1,327,976	1,716,799	1,873,741	2,513,309a	3,474,423a	5,253,299a	10,115,367a
Received for roads during year .....	.....	.....	.....	86,943	164,090	284,019	176,644	381,321a	296,771a
Expended for paupers during year	616,344	612,684	650,105	698,973	728,052	877,425	1,064,670	1,473,402	1,879,602
Expended for salaries during year	242,419	291,705	389,399	387,191	484,253	669,345	513,218	734,282	985,714
Expended for schools during year	1,170,682	1,328,607	1,919,369	2,401,129	2,840,176	4,052,170	5,224,281	8,378,940	13,584,436
Expended for police during year .....	.....	.....	{ 500,492	560,361	603,243	765,447	954,153	1,248,736	2,349,574
Expended for fire department during year.	584,881	759,170	478,730	557,271	580,005	913,834	1,189,035	1,455,368	2,568,797
Total grand list, last completed	352,795,926	372,874,447	444,321,927	508,143,749	612,111,711	738,227,086	948,399,019	1,174,551,713	1,661,776,728
Grand list as corrected by Board of	.....	.....	.....	.....	.....	.....	.....	.....	.....
Equalization .....	.....	.....	.....	570,163,749	677,396,711	833,537,086	1,041,384,019	.....	.....

a Includes bridges in many municipalities.

b No additions made to list in excess of \$2,500,000.

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